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**MINISTRY OF HEALTH** 

# **OPHTHALMOLOGY**

# STANDARD PRACTICE GUIDELINES FOR ASSISTANT MEDICAL OFFICERS IN OPHTHALMOLOGY





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### FORWARD MESSAGE

Bismillahirrahmanirrahim, Assalamualaikum warahmatullahi wabarakatuh,

. .

On behalf of the Ministry of Health Malaysia, I extend my heartfelt congratulations to Cawangan Perkhidmatan Penolong Pegawai Perubatan (CPPPP) and all committee members for the successful production of the book "Standard Practice Guidelines For AMO'S In Ophthalmology." Alhamdulillah, this accomplishment is a testament to your dedication and commitment to advancing the knowledge and skills of Assistant Medical Officers (AMO) in the Discipline of Ophthalmology. The publication of these standard practice guidelines is a significant milestone that will undoubtedly contribute to the enhancement of healthcare services in this specialized field.

I commend the efforts of all Assistant Medical Officers and encourage them to actively participate in the creation of educational materials that benefit the medical community. Your collective contributions play a crucial role in fostering continuous learning and improvement within the healthcare sector. May Allah SWT reward all involved in this noble effort, and may the book serve as a valuable resource for AMOs, aiding them in providing optimal care and adhering to the designated procedures in Ophthalmology.

SELAMAT MAJU JAYA! May your future endeavors continue to be blessed with success and positive impact on healthcare delivery in Malaysia.

DATUK DŔ MUHAMMAD RADZI BIN ABU HASSAN Director General Of Health Malaysia



### FORWARD MESSAGE

Bismillahirrahmanirrahim, Assalamualaikum warahmatullahi wabarakatuh,

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Alhamdulillah. I extend sincerest mv appreciation and gratitude to Cawangan Perkhidmatan Penolong Pegawai Perubatan (CPPPP) for the remarkable achievement of successfully publishing this highly comprehensive book within the designated timeframe. This accomplishment is truly commendable and marks a significant milestone that will serve as a valuable guide for all members of the Assistant Medical Officers (AMO) profession. The timely publication of such a comprehensive guide is a testament to the dedication, hard work, and organizational skills of the CPPPP team. This book is poised to be an invaluable resource, providing essential guidance to Assistant Medical Officers in the field of Ophthalmology. It reflects a commitment to enhancing knowledge, skills, and professional practices within the AMO community.I express my deepest gratitude to all those involved in bringing forth this valuable contribution to the medical field. May this comprehensive guide facilitate continuous improvement in healthcare practices and contribute to the elevation of standards within the AMO profession.

Emphasizing safety and the quality of procedures is crucial, and your recognition

of this highlights the commitment to ensuring the well-being of patients. By adhering to the guidelines outlined in the book, Assistant Medical Officers (AMO) can contribute to the reduction of complications, promoting a safer healthcare environment. Your acknowledgment that this guideline book is a basic guide underscores the importance of continuous improvement. Indeed, healthcare practices evolve, and regular updates will ensure that the guidelines remain aligned with the best standards and practices in the field of Ophthalmology. I share your hope that this guideline book will be widely followed and used as a reference by all AMOs. thereby contributing to the maintenance of service quality and patient safety. May the commitment to excellence and continuous improvement lead to even better publications in the future. Thank you for your thoughtful message, and may your efforts in healthcare be blessed with success and positive outcomes.



**DR. MOHAMED IQBAL BIN HAMZAH** Director Medical Practice Division

#### FORWARD MESSAGE

Assalamualaikum w.b.t dan Salam Sejahtera,

. .

Alhamdulillah, it is truly a moment of gratitude that Cawangan Perkhidmatan Penolong Pegawai Perubatan (CPPPP) and all committee members have successfully produced the "Standard Practice Guidelines (SPG) For AMO'S In Ophthalmology." This achievement reflects a collective effort and dedication to advancing the standards of care within the profession of Assistant Medical Officers (AMO) in the Ministry of Health Malaysia. The establishment of this SPG book is a significant step towards standardizing ophthalmology procedures and services. It serves as a comprehensive guide, drawing upon the insights and contributions of various experienced parties involved in its documentation.

The collaborative effort in shaping this guideline book is commendable and speaks to the commitment to excellence within the healthcare community. By following the guidelines outlined in the SPG, AMOs can contribute to the advancement of the profession and, most importantly, provide optimal care to the community. Standardized practices not only enhance the efficiency and effectiveness of healthcare services but also contribute to patient safety and satisfaction. May the contributions from Cawangan Perkhidmatan Penolong Pegawai Perubatan lead to further enhancements in the quality of healthcare services.

Thank you for your dedication and commitment to the advancement of healthcare practices.

**DR MOHD AZIZ BIN HUSNI** Head of Speciality Ophthalmology Ministry of Health





Assalamualaikum w.b.t dan Salam Sejahtera,

Alhamdulillah, praise be to Allah S.W.T for the successful completion of this important book within the designated timeframe. This accomplishment marks a significant contribution to the field of Ophthalmology Discipline, serving as an introduction for Assistant Medical Officers (AMOs). On behalf of the AMO profession, I express my heartfelt happiness and gratitude to the Committee members responsible for producing this invaluable guideline book. The collaborative experienced effort of Ophthalmology Specialists and AMOs in crafting this book is commendable. I acknowledge the challenges and obstacles faced during the preparation. and I appreciate the dedication that went into creating a comprehensive resource for the discipline of Ophthalmology.

The guidelines outlined in this book fill a crucial gap, providing specific, organized, and detailed instructions for AMOs in the performance of important procedures. This level of guidance is invaluable for the enhancement of service delivery and the standardization of practices within the field of Ophthalmology. I extend my deepest appreciation and gratitude to the committee members for their initiative and dedication for supporting the AMO profession. Your efforts are integral to the continuous improvement of healthcare practices. May the utilization of these guidelines contribute to the improvement and maintenance of the quality of Ophthalmology discipline service practices by AMOs. Your commitment to excellence is truly commendable.

Thank you for your invaluable contribution to the advancement of healthcare practices.

**ZULHELMI BIN ABDULLAH** Head of Assistant Medical Officer Malaysia

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# Section A - Clinic Procedure

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TRIAGING AND HISTORY TAKING				
INTRODUCTION	Triaging is a process for sorting ocular problem into groups based on their need for or likely from immediate medical treatment. It is also			
	ensured that patients are treated according to their clinical urgency			
	Simple history taking involves asking appropriate questions of patients			
	or their relatives to obtain information to aid diagnosis.			
SCOPE	• The procedure will be performed by a privileged Assistant Medical			
	• All patient attending the clinic with new referral letter.			
SPECIFIC	To obtain information to aid diagnosis			
OBJECTIVE	• To identify care priorities and plan care			
	• To focus examination and indicate what investigations are needed.			
WORKFLOW	Chart -			
	Start			
	↓			
	Receive patient			
	<b>↓</b>			
	Assess/verify patient			
	Prepare equipment			
	Prepare patient			
	Perform the procedure			
	Yes Refer to			
	Ocular amargangy?			
	emergency?			
	No			
	Appointment date			
	Documentation			
	End task			

WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>	
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	• Patient appointment card / record	
Prepare Equipment	Prepare the equipment	Manual Arahan Kerja	• Torch light	
Prepare Patient	• Respect the patient privacy and confidentiality while taking the history taking	Manual Arahan Kerja		
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li>Steps Performed <ol> <li>Identify</li> <li>presenting</li> <li>problem/Referral letter.</li> </ol> </li> <li>Ask patient <ul> <li>question relating to</li> <li>previous ocular</li> <li>history.</li> </ul> </li> <li>Ask patient <ul> <li>questions relating</li> <li>to his/her general</li> <li>health.</li> </ul> </li> <li>Ask patient <ul> <li>question relating to</li> <li>his/her social</li> <li>history</li> </ul></li></ul>	Manual Arahan Kerja		

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Documentation	<ul> <li>Record procedure</li> </ul>	Manual Arahan	Procedure book /
		kerja	census.
Ocular Emergency?	<ul><li> If yes: Refer to Doctor</li><li> If no: Provide appointment</li></ul>	Manual Arahan kerja	• Appointment book/card

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	
Prepare Equipment	• Prepare the instrument such as occluder and visual acuity chart is ready to use.	Manual Arahan Kerja	<ul> <li>Occluder</li> <li>Vision chart / Projector chart / Snellen</li> <li>Sheridan Gardiner (toddler)</li> <li>E Chart (illiterate)</li> </ul>
Prepare Patient	<ul> <li>Inform the patient about the procedure.</li> <li>Ensure that the patient can recognize letters, numbers, or pictures before you administer the test</li> <li>Enquire whether patient is using contact lens/glasses/eye prosthesis</li> </ul>	Manual Arahan Kerja	
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li>Sit the patient at appropriate distance from the visual acuity chart</li> </ul>	Manual Arahan Kerja	

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Steps Performed	
1) Ensure the patient	
place the occluder	
at the right eye	
(OD) correctly	
2) Record the lowest	
line the patient	
was able to read	
3) Perform the	
pinhole test if the	
visual acuity is 6/9	
or worse, then	
record the findings	
4) If patient unable	
to read at 6 meters,	
move the patient	
closer to the	
Snellen chart,	
reduce 1 meter at	
the time until the	
patient is able to	
recognize the	
largest optotype.	
Record the visual	
acuity	
5) If the largest	
optotype cannot be	
read at 1 meter	
(1/60), hold up	
your fingers and	
check where the	
patient can count	
them. Record the	
distance that the	
patient was able to	
correctly count the	
number of fingers	
that you were	
holding. CF2'	
Means that the	
patient could	
count fingers at 2	
feet.	
6) If the patient	
cannot count	
fingers, wave your	
hand in front the	
eye and check if	
the patient can see	
the movement.	

0-

	Record as HM	
	(hand movement)	
	7) If the patient	
	cannot see the	
	movement of your	
	hand, then shine a	
	light in the eye of	
	patient. If the	
	patient sees the	
	light, record it as	
	'PL' (perception	
	of light). If the	
	patient can't see	
	the light, record it	
	as 'NPL' (No	
	Perception of	
	Light).	
	8) Repeat the above	
	steps to the left	
	eye (OS)	
Documentation	• Record procedure	Procedure book /
		census.

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Daiber, H. F., & Gnugnoli, D. M. (2021). Visual Acuity. PubMed; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK563298/







WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	Patient     appointment card /     record
Prepare Equipment	Prepare the near vision chart	Manual Arahan Kerja	• Near vision chart
Prepare Patient	<ul> <li>Inform the patient about the procedure.</li> <li>Request patient to sit comfortably on the seat provided</li> <li>Ensure adequate light is focused on the near vision chart used</li> <li>Ask patient to use reading glasses if available</li> </ul>	Malaysian Patient Safety Goal 2.0	
Perform the Procedure	<ol> <li>Start with the right eye while covering the left eye</li> <li>Request the patient to hold the card at a distance between 33 cm and 40 cm away from the patient.</li> <li>Ask the patient to read the sentences in the paragraph of the near vision card/chart that is visible and can be read with ease (starting from the</li> </ol>	Manual Arahan Kerja	

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	largest to the smallest possible) 4) Record the paragraph with the smallest possible alphabets that the patient can read without much effort (e.g. N6) 5) Repeat the entire process when testing the near vision of the left eye with the right eye covered.		
Documentation	• Record procedure • Enter results in the vision slip / patient records where applicable	Manual Arahan Kerja	Procedure book / census.

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	COLOR VISION TEST		
INTRODUCTION	A color vision test checks the ability to distinguish between different		
	colors. Color vision can be assessed using Ishihara plates, each of		
	which contains a colored circle of dots. Within the pattern of each		
	circle are dots which form a number or shape that is clearly visible to		
	those with normal color vision and difficult or impossible to see for		
	those with a red-green color vision defect.		
SCOPE	• The procedure will be performed by a privileged Assistant Medical		
	Officer (AMO).		
	All patients indicated for the procedure		
SPECIFIC	• To identify, classify, or grade a color vision deficiency		
OBJECTIVE	• To evaluate fitness for a certain occupation (congenital and acquired		
	color deficiencies) or as a diagnostic aid (acquired color deficiency).		
WORKELOW			
WORKFLOW	Start		
	Receive patient		
	Assess/verify patient		
	×		
	Fit For		
	Procedure		
	Refer to Doctor		
	Yes V		
	Prepare instrument/equipment		
	Prepare patient		
	<b>▼</b>		
	Perform the procedure		
	Documentation		
	¥ .		
	End Task		

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
Prepare Equipment	Make sure Ishihara chart ready to be used	Manual Arahan Kerja	• Ishihara chart/book/ color vision chart
Prepare Patient	<ul> <li>Request patient to sit comfortably on the seat provided</li> <li>Inform the patient about the procedure.</li> </ul>	Manual Arahan Kerja	
Perform the Procedure	<ol> <li>Ask patient to use reading glasses if available</li> <li>Ensure adequate light is focused on the colour vision chart used</li> <li>Examine one eye at a time</li> <li>Request the patient to hold the Ishihara Chart at an appropriate reading distance from the patient's eye (35 cm)</li> <li>Ask the patient to read the number displayed on each page of the chart</li> <li>Ask the patient to trace the colored line displayed if</li> </ol>	Manual Arahan Kerja	

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**F**.:



	the patient is unable to read / recognize numbers 7) Record the result (e.g.: 24/24) 8) Repeat the assessment on the other eye.		
Documentation	• Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Manual Arahan Kerja	• Patient record
Prepare Equipment /Medication	<ul> <li>Prepare equipment</li> <li>Check the functionality of tonopen and calibration</li> <li>Prepare topical anesthesia</li> </ul>	Manual Arahan Kerja	<ul> <li>Hand-held tonometer with tip cover.</li> <li>Topical anaesthetic eye drops.</li> </ul>
Prepare patient.	<ul> <li>Explain the purpose of the procedure to patient.</li> <li>Position the patient comfortably in a sitting position in a room with adequate lighting.</li> </ul>	Malaysian Patient Safety Goal 2.0	Patient record
Perform the Procedure	Ask patient     permission to start <u>Steps Performed</u>	Arahan Kerja manual	
	<ol> <li>Instilled topical anaesthesia</li> <li>Instruct the patient to open both eyes and focus to the front</li> <li>Touch the cornea surface with the covered tip of the handheld</li> </ol>		<ul> <li>Topical Anesthesia eye drop</li> <li>Hand-held tonometer</li> </ul>



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IOP ME.	ASUREMENT USING NON-CONTACT TONOMETRY (AIR PUFF TONOMETER)		
INTRODUCTION	Intraocular pressure (IOP) measurement is a procedure included in eve assessment.		
SCOPE	• The procedure will be performed by a privileged Assistant Medical Officer (AMO).		
SPECIFIC	The instruments used to measure IOP can be divided into contact and		
OBJECTIVE	non-contact tonometry. Air Puff tonometer is an example of non- contact tonometry.		
WORKFLOW	Start Task Receive patient Assess / verify patient / correct site Fit for Procedure? Yes Prepare equipment Prepare patient Prepare patient Health Education Documentation Documentation		

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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT	
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter / Record book / census</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Ensure verbal consent has been taken</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0		
Explanation	<ul> <li>Verify the correct patient</li> <li>Explain to the patient regarding the procedure (sudden surge of air hitting the eye).</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient appointment card	
Prepare Equipment / machine	<ul> <li>Check the functionality of Airpuff tonometer.</li> <li>Check calibration.</li> <li>Position the patient comfortably in a sitting position in a room with adequate lighting.</li> </ul>	Arahan Kerja Manual	Airpuff     tonometer     machine	
Perform the Procedure	<ul> <li>Ask patient permission to start</li> <li><u>Steps</u> <u>Performed</u></li> <li>1) Instruct patient to rest the head and chin on the</li> </ul>	Arahan Kerja Manual	<u>Steps of Items</u> 1) Airpuff tonometer machine	

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	<ul> <li>chin and headrest.</li> <li>2) Instruct the patient to open both eyes to focus on the target on the machine.</li> <li>3) Align the target on the patient's cornea.</li> <li>4) Press the button to example.</li> </ul>		
	<ul> <li>5) Repeat twice and an average reading is recorded.</li> <li>6) Print the result</li> </ul>		
Health Education	Observe side     effects		
Documentation	Record     procedure	Arahan Kerja Manual	Procedure book / census.
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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	Patient     appointment card /     record
Prepare Equipment	• Preparation of instrument	Manual Arahan Kerja	<ul> <li>Appropriate semi- darkened room</li> <li>Bright pen light / torch light.</li> </ul>
Prepare Patient	<ul> <li>Inform the patient about the procedure.</li> <li>Position patient in a comfortable position</li> <li>Dim the light</li> </ul>	Manual Arahan Kerja	<ul> <li>Patient record</li> <li>Comfortable chair / couch</li> </ul>
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li>Hand washing</li> </ul>	Manual Arahan Kerja	• Hand sanitizer / soap
	<ul> <li><u>Steps Performed</u></li> <li>1) Keep the beam of light steadily on the first eye for at least 3 seconds.</li> <li>2) Observe whether the pupil of the eye being illuminated reacts briskly and constricts fully to the light. Also</li> </ul>		• Bright pen light / torch light

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	observe what		
	happens to the		
	pupil of the other		
	eye: does it also		
	constrict briskly?		
	3) Move the light		
	quickly to shine in		
	the other eye. Hold		
	the light steady for		
	3 seconds.		
	4) Observe whether		
	the pupil being		
	illuminated stays		
	the same size, or		
	whether it gets		
	bigger. Observe		
	also what happens		
	to the other eye.		
Health Education	<ul> <li>Emphasize follow</li> </ul>	Malaysian Patient	
	up compliance.	Safety Goal 2.0	
	<ul> <li>Compliance to</li> </ul>		
	medication		
Documentation	• Record the		• Procedure book /
	procedure		census.

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defect-rapd

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure verbal consent has been taken.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
Prepare Equipment / Medication	<ul> <li>Prepare Medication</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li>Disposable item</li> </ul>		<ul> <li>Eye drop / Eye ointment</li> <li>Disposable items i. Cotton balls</li> </ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Explain the procedure to the patient including potential side effects</li> <li>Position patient in a sitting position with head tilted back</li> </ul>	Manual Arahan Kerja	• Patient appointment card / record
Perform the Procedure	• Ask patient permission to start.	Manual Arahan Kerja	

Instillation Of Eye Drop	• Eye drop
<ul> <li>Instillation Of Eye Drop</li> <li>Wash hand. Use aseptic techniques and protocols following infection control guidelines</li> <li>Remove cap; hold the dropper over the eye.</li> <li>Pull lower eyelid in the non- dominion hand, and dropper on the dominion hand gently compress the bulb to allow one drop to fall into the lower conjunctiva sac.</li> <li>Cap must always be on non-hand during instillation of eye drops</li> <li>Ensure that the dropper is about 2cm above the eye.</li> <li>Ask the patient to close the eye gently for 30 seconds.</li> <li>Wipe any excess fluid with swab.</li> <li>Observe for any complain of irritation or reaction.</li> <li>Notify the Doctor of any drug</li> </ul>	• Eye drop
allergic reaction. 10) Replace the cap immediately after use. 11) Wash and dry hands.	

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	Application of Eye Ointment		• Eye ointment
	<ol> <li>Ask patient to look up.</li> <li>Gently pull lower eye lid.</li> <li>Squeeze 1cm of ointment into the middle lower fornix.</li> <li>Ask the patient to close the eye gently for 30 seconds.</li> <li>Wipe any excess ointment with swab.</li> <li>Observe for any complain of irritation or reaction.</li> <li>Notify the Doctor of any drug allergic reaction.</li> <li>Replace the cap immediately after use.</li> <li>Wash and dry hands</li> </ol>		
Health Education	• Do not drive until your normal vision has been restored		
Documentation	Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure verbal consent has been taken.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	Patient     appointment card /     record
Prepare Equipment / Medication	<ul> <li>Prepare Direct Ophthalmoscope</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li>Prepare disposable item</li> </ul>	Manual Arahan Kerja	<ul> <li>Direct Ophthalmoscope</li> <li>Medication <ol> <li>Topical Anaesthesia</li> <li>Dilating drops.</li> </ol> </li> <li>Disposable items <ol> <li>Cotton ball</li> </ol> </li> </ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Confirm adequate dilation.</li> <li>Inform the patient about the procedure.</li> <li>Ask for chaperon assistance if necessary</li> </ul>	Manual Arahan Kerja	<ul><li>Patient record</li><li>Dilating eye drop</li></ul>
Perform the Procedure	• Ask patient permission to start.	Manual Arahan Kerja	

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	<ul> <li>12) Move in closer, staying nasally until you see the optic nerve</li> <li>13) Rotate the diopter lens until the optic disc comes into focus</li> <li>14) Measure the cup to disc ratio</li> <li>15) Scan slightly up, down, right and left to look at the vessels</li> <li>16) Move out temporally to find the macula and fovea</li> <li>17) Repeat the same technique on the other eye</li> </ul>	
Health Education	<ul> <li>Do not drive until your normal vision has been restored</li> <li>Wear sunglasses to protect your eyes from sunlight</li> <li>The drops usually wear off in several hours.</li> </ul>	
Documentation	• Record procedure	• Procedure book / census

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ophthalmoscope/



	SCHIRMER'S TEST		
INTRODUCTION	The Schirmer's Test evaluate aqueous tear production. This test is		
	mainly performed on patients experiencing symptoms of dry eye.		
SCOPE	• The procedure will be assisted by a privileged Assistant Medical		
	Officer (AMO).		
	All patient with severe dry eye condition.		
SPECIFIC	• To determine the severity of dry eye.		
OBJECTIVE			
WORKFLOW			
	(Start Task		
	Receive patient		
	Access / yerify notiont /		
	Assess / verily patient /		
	correct site/ anergy status		
	× .		
	Fit for No		
	Procedure?		
	Yes Y		
	Prenare equipment/		
	medication		
	Prepare patient		
	Refer to doctor		
	Assist the procedure		
	Health Education		
	Theatth Education		
	Documentation		
	<b>V</b>		
	Find Task		

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book/ census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Explain to the patient the indication of the procedure</li> <li>Ensure verbal consent has been taken</li> </ul>	Malaysian Patient Safety Goal 2.0	Record book/ cencus
Prepare Equipment/Medicatio n	<ul> <li>Prepare Schirmer's test paper</li> <li>Verify correct medication.</li> <li>Check medication and equipment expiry date.</li> </ul>	Policies & procedures on Infection and Control. MOH. 2018 (3 <sup>rd</sup> Edition)	<ul> <li>A pair of Schirmer's test paper</li> <li>Timer clock</li> <li>Ruler</li> <li>Topical anaesthetic eye drop</li> </ul>
Prepare patient	<ul> <li>Inform the patient about the procedure.</li> <li>Position patient in supine or seated position.</li> <li>Chaperon assistance if necessary</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i>	Patient record
Perform the procedure	<ol> <li>Topical anaesthetic eye drop</li> <li>Ask patient to look up and draw the lower lid downward and lateral.</li> <li>Hook the rounded bent-end of the sterile strip to the outer end of the lower fornix of</li> </ol>	Manual Arahan Kerja	<ul> <li>Topical anaesthetic eye drop</li> <li>Schirmer strip</li> </ul>

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	each eye to avoid		
	touching the cornea		
	& eyelashes which		
	can produce reflex		
	lacrimation and pain.		
	4)Set the timer for 5		Timer clock
	minutes		
	5)Asked the patient to		
	keep eyes gently		
	closed.		
	6)Remove the		
	Schirmer" test paper		
	after 5 minutes.		
	7)Measure the		• Ruler
	moistened part of		
	Schirmer's Test		
	paper		
	8)Normal tear function,		
	> 15mm		
	9)Mild dry eye, 10 -		
	15mm		
	10) Moderate dry eye, 5		
	- 10mm		
	11) Severe dry eye, 0 -		
	5mm		
Health Education	<ul> <li>Emphasize on</li> </ul>		
	follow up		
	compliance		
Documentation	<ul> <li>Record procedure</li> </ul>	Manual Arahan	• Procedure book /
	-	Kerja	census.

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	Patient appointment card / record
Prepare Equipment / Medication	<ul> <li>Prepare disposable item.</li> <li>Verify correct medication.</li> <li>Check medication</li> </ul>		<ul> <li>Disposable items</li> <li>i. Litmus paper (acidbase pH paper)</li> <li>Medication</li> <li>i. Topical Anaesthesia</li> </ul>
Prepare Patient	<ul> <li>expiry date.</li> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in supine or seated before procedure.</li> <li>Chaperon assistance if necessary</li> </ul>	Manual Arahan Kerja	Patient record
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li><u>Steps Performed</u> <ol> <li>Do hand wash.</li> <li>Instruct patient to look up.</li> <li>Pull down the lower lid.</li> </ol> </li> <li>Litmus paper (acid- base pH paper) applied to conjunctiva fornix (where bulbar and palpebral conjunctiva meet)</li> <li>Observe eye appearance for injury</li> <li>Interpretation <ol> <li>Normal pH 7</li> <li>Alkaline 8-14</li> <li>Acid 1-6</li> </ol> </li> </ul>	Manual Arahan Kerja	

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Health Education	<ul> <li>Observe side effects / complications</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient     particulars in patient's     record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
Prepare Equipment / Medication	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li>Prepare equipment</li> </ul>		<ul> <li>Topical anaesthesia</li> <li>Fluorescein strip</li> </ul>
Prepare Patient	<ul> <li>Inform the patient about the procedure.</li> <li>Position patient in supine or seated position.</li> <li>Chaperon assistance if necessary</li> </ul>	Manual Arahan Kerja	Patient record
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li><u>Steps Performed</u> <ol> <li>Ask the patient to look upwards.</li> <li>Stain fluorescein strip with topical anaesthesia.</li> <li>Use a fluorescein strip to touch the surface of conjunctiva and ask patient to blink.</li> <li>Examine the eye using slit lamp with cobalt- blue light to detect the finding.</li> </ol></li></ul>	Manual Arahan Kerja	
Health Education	<ul> <li>Compliance to medication</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient details in the patient record book."	Malaysian Patient Safety Goal 2.0 (MPSG)	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify the correct patient.</li> <li>Verify the correct site.</li> <li>Verify the correct procedure.</li> <li>Provide a brief history of the nature of the injury.</li> <li>Ensure that verbal consent has been obtained.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
Prepare Instruments / Equipment / Medication	<ul> <li>Prepare a complete irrigation set.</li> <li>Prepare irrigation solution</li> <li>Prepare supplementary instruments.</li> <li>Verify the correctness of the medication.</li> <li>Check the medication expiry date.</li> </ul>		<ul> <li>pH paper</li> <li>Sodium chloride drip 0.9%</li> <li>Gauze</li> <li>Orange stick</li> <li>Supplementary instruments</li> <li>i. Lid speculum</li> <li>ii. Kidney dish</li> <li>Disposable items</li> <li>i. Glove</li> <li>ii. OT cap</li> <li>iii. Drip set and stand.</li> <li>Medication</li> <li>i. Topical Anaesthesia</li> </ul>

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Prepare Patient	• Verify the patient.	Manual Arahan	<ul> <li>Patient record</li> </ul>
	Provide	Kerja	book
	information about		
	the procedure.		
	• Position supine on		
	the table.		
	Instill tonical		
	anesthesia		<ul> <li>Topical anesthesia</li> </ul>
	• Assistant holds a		eye drop
	• Assistant noids a kidney dish		
	• Chanarana		
	• Chaperone		
	assistance if		
D.C. (1	needed.		<b>D</b> ·
Perform the	• Brief the patient	Manual Aranan	• Drip set and stand
Procedure	about the	Kerja	• Lid speculum
	procedure.		<ul> <li>Normal saline</li> </ul>
	• Instruct eye		
	movements during		
	irrigation.		
	~ ~ ~		Items
	Steps Performed		
	1) $C_{1} = 1 + 4 + 4 + 4$		• pH paper @ litmus
	1) Check the pH of		paper
	both eyes.		
	2) Open the eye (use		
	2) Open the cyc (use		<ul> <li>Lid speculum</li> </ul>
	an eye specululli li		*
	avallable).		
	2) Stand on the		• Drip set and
	affected side and		normal saline
	irrigate the ave		0.9%.
	imgate the eye.		
	4) Direct fluid flow		
	from inner to outer		
	conthus		
	cantinus.		
	5) Instruct eve		
	movements: un		
	down right left		
	during irrigation		
	aumg migauon.		

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	6) Evert upper and lower lids to clean		~
	7) Remove solid		• Cotton ball/eye
	narticles using a		sponge
	cotton bud/eve		
	sponge		
	(conjunctiva and		
	lid only).		• Wet gauze
	8) Clean the eye		i ei guuze
	with moist gauze.		Normal saline
	9) Irrigate with 2		0.9%
	pints of normal		
	saline.		• pH paper
	10) Repeat checking		
	pH 10 minutes		
	post-irrigation.		<ul> <li>Normal saline</li> </ul>
	11) Repeat irrigation		0.9%
	for abnormal pH.		
	12) Repeat		
	procedure on the		
Health Education	other eye.		
Health Education	• Advise the patient		
	• Wait to say the		
	- wait to see the		
	Take medication		
Documentation	Pacord procedure	Manual Araban	• Procedure book /
Documentation	• Record procedure	Koria	
		пстри	census.

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	FIRST EYE DRESSING		
INTRODUCTION	Eye dressing is a procedure to clean up the eye after any procedure performed		
	to prevent cross infection from surrounding area.		
SCOPE	• The procedure will be performed by a privileged Assistant Medical Officer		
	(AMO).		
	• All patient that needs eye dressing procedure.		
SPECIFIC	To promote healing and prevent infection.		
OBJECTIVE			
WORKELOW			
WORKFLOW			
	(Start Task)		
	Receive patient		
	Assess / verify patient /		
	correct site /Allergy status		
	Eit for		
	Procedure?		
	Procedure?		
	Ves		
	Prepare equipment/		
	medication		
	Prepare patient		
	Refer to doctor		
	r enorm die procedure		
	Health Education		
	Documentation		
	Find Task		

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	Patient appointment card / record
Prepare equipment/ medication	<ul> <li>Prepare disposable items</li> <li>Prepare solutions</li> <li>Verify medication and expiry date</li> </ul>	Arahan Kerja manual	<ul> <li>Disposable items:         <ul> <li>Disposable items:</li> <li>Disposable dressing set</li> <li>Sterile glove</li> <li>Eye pad</li> <li>Eye shield</li> </ul> </li> <li>Solutions         <ul> <li>Normal saline 0.9 %</li> <li>Medication             <ul> <li>Topical Antibiotics</li> </ul> </li> </ul> </li> </ul>
Prepare Patient	<ul> <li>Verify correct patient</li> <li>Inform the patient about the procedure.</li> <li>Position patient</li> </ul>	Manual Arahan Kerja	Patient record
Perform the Procedure	<ul> <li>Ask patient permission to start. <u>Steps Performed</u></li> <li>1) Explain the purpose and the procedure to patient.</li> <li>2) Place the patient in the required position</li> <li>3) Wash and dry hands</li> </ul>	Arahan Kerja manual	

4) Assistant to open	• Disposable dressing
the sterile	set and Normal
dressing packs	Saline 0.9 %
and pour sterile	
Sodium Chloride	
0.9% solution	
5) Prepare cotton	Sterile Cotton ball
ball swabs by	
soaking it in	
sterile Sodium	
Chloride 0.9%	
Solution	
6) Instruct patient	
to close both	
eyes	
7) Gently swab the	
lid starting from	
the medial	<ul> <li>Sterile Cotton ball</li> </ul>
canthus and	
move towards	
lateral canthus	
with one stroke	
8) Using a new	
cotton ball swab	
each time once	
only until all	
discharge has	
been removed	
9) Instruct patient	
to open the	
eyelids and look	
up	
10) Gently swab the	<ul> <li>Topical Antibiotics</li> </ul>
lower lid in same	
manner starting	
from the medial	<b>T</b> 1 1
canthus	• Eye pad and eye
11) Instruct patient	shield
and repeat	
procedure for	
12) Examina tha	
eves under	
adequate	
lighting	
13) Instil eve drops/	
ointment as	
ordered by	
doctor.	

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	14) Apply eye pad / shield if indicated 15) Clean the instrument/ trolley used for procedure 16) Wash and dry hands		
Health education	<ul> <li>Wound care – obverse any bleeding / inflammation / sign of infection.</li> <li>Clinic TCA –</li> </ul>	Malaysian Patient Safety Goal 2.0	Appointment card.
	gentle reminder to patient as to follow post- op		
Documentation	Record procedure	Manual Arahan Kerja	Procedure book / census.

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Stevens, S. (2016). Cleaning and dressing the eye after surgery. *Community Eye Health*, 29(94), 36. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5100474/

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COPTHALMOLOGY

SUIURE IO OPEN (SIO) EYELID		
Suture to Open (STO) is a procedure for the removal of sutures using		
Iris scissors and Adson forceps.		
• The procedure will be performed by a privileged Assistant Medical		
Officer (AMO).		
• All patient requiring to remove eyelid suture.		
• To remove suture from a healed wound without damaging newly		
formed tissue.		
• To remove suture from a healed wound without damaging newly formed tissue.		

WORK INSTRUCT	ION	1	I
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	Patient     appointment card /     record
Prepare Instruments / Equipment /	<ul> <li>Prepare complete Dressing set</li> <li>Prepare disposable item</li> <li>Prepare solutions</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>Dressing Set <ol> <li>Iris Scissors</li> <li>Adson forceps</li> <li>Disposable items <ol> <li>Small gauze</li> <li>Cotton swabs</li> <li>Dressing Forceps</li> </ol> </li> <li>Solutions <ol> <li>Antiseptic</li> <li>Medication</li> <li>Topical</li> <li>Anaesthesia</li> </ol> </li> </ol></li></ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in supine on the bed.</li> <li>Chaperon assistance if necessary</li> </ul>	Manual Arahan Kerja	• Patient record
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li><u>Steps Performed</u> <ol> <li>Using Dressing Forceps dip cotton swab into antiseptic solution and clean suture site.</li> </ol> </li> </ul>	Manual Arahan Kerja	<ul> <li>Dressing forceps and cotton swab.</li> </ul>

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	<ul> <li>2) Hold the straight scissors in dominant hand and tooth forceps in non- dominant hand</li> <li>3) Grasp knot of suture with forceps and gently pull up knot while slipping the tip of the scissors under suture near the skin.</li> </ul>		• straight scissors and tooth forceps.
	<ul><li>4) Examine the knot.</li><li>5) Cut under the knot as close as possible to the skin at the distal end of the knot.</li></ul>		• straight scissors
	<ul> <li>6) Grasp knotted end with forceps, and in one continuous action pull suture out of the tissue and place cut knot on gauze.</li> <li>7) Repeat the step until every suture is removed.</li> </ul>		• tooth forceps
Health Education	<ul> <li>Observe side effects         <ul> <li>/ complications</li> </ul> </li> <li>Emphasize on         <ul> <li>follow up             compliance</li> </ul> </li> </ul>		
Documentation	• Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	•Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	Patient     appointment card /     record	
Prepare Equipment / Medication	<ul> <li>Prepare disposable items</li> <li>Prepare solutions</li> <li>Verify correct medication</li> </ul>	Arahan Kerja manual	<ul> <li>Disposable item <ol> <li>Disposable</li> <li>Disposable</li> <li>Disposable</li> <li>dressing set</li> <li>Eye Pads</li> <li>Eye Shield</li> <li>Wicropore tape</li> </ol> </li> <li>Solution <ol> <li>Normal saline</li> <li>9%</li> </ol> </li> <li>Topical / Ointment</li> </ul>	
	<ul> <li>Check medication expiry date.</li> </ul>		Antibiotics	
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient comfortably.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety goal 2.0	• Patient record	
Perform the Procedure	• Ask patient permission to start.	Manual Arahan Kerja		
	Steps Performed		• Disposable dressing set	



	<ol> <li>Refer eye dressing Standard Practice Guidelines (SPG)</li> <li>In cases of trauma, do not touch the eye; tape the eye shield on the effected eye with micropore</li> </ol>		• Eye Pads, Eye Shield and Micropore tape
Health Education	• Observe side effects / complications		
Documentation	Record procedure	Manual Arahan	Procedure book /
	1	Кегја	census.

#### REFERENCE

Antwi-Boasiako, S. (2020). *Ophthalmic nurses: vital team members in the push for better eye health*. PubMed Central (PMC). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8115702/

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Review photographic request, confirm area of interest.</li> <li>Explain to the patient the indication of the procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card</li> <li>Referral letter</li> </ul>
Prepare Instruments / Equipment / Medication	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li>Make sure fundus camera works perfectly.</li> <li>Enter patient demographic information into capture software.</li> <li>Set eyepiece for accommodative correction.</li> <li>Set viewing angle, flash power and viewing light.</li> </ul>		<ul> <li>Medication <ol> <li>Topical <ul> <li>anaesthesia eye</li> <li>drops if indicated.</li> </ul> </li> <li>Dilating eye <ul> <li>drops if indicated.</li> </ul> </li> <li>Fundus camera</li> </ol></li></ul> <li>Patient <ul> <li>appointment card</li> </ul></li>

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Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Confirm adequate dilation if indicated.</li> <li>Inform the patient about the procedure.</li> <li>Position patient's head on headrest for photography.</li> <li>Dim the light if necessary.</li> <li>Chaperon assistance if necessary.</li> </ul>	Manual Arahan Kerja	<ul> <li>Patient appointment card</li> <li>Dilating eye drop</li> </ul>
Perform the Procedure	<ul> <li>Ask patient permission to start.</li> <li><u>Steps Perform</u> <ol> <li>Establish fixation with external or internal fixation device.</li> <li>Use joystick to align illumination beam within pupil.</li> <li>Focus on designated field of view.</li> <li>Take colour photographs of required area of interest.</li> <li>Use lateral shift of joystick to obtain sequential stereo pairs.</li> <li>Review images for quality, correct artifacts and adjust settings accordingly.</li> </ol></li></ul>	Manual Arahan Kerja	• Fundus camera.
Health Education	• Care of metabolic disease.		



	<ul><li>i. Compliance to medication.</li><li>ii. Compliance of follow up.</li><li>iii. Compliance to treatment.</li></ul>	
Documentation	Record procedure	• Procedure book / census.

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OPTHALMOLOGY

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OPTICAL COHERENCE TOMOGRAPHY (OCT),			
INTRODUCTION	Continel Coherence Temperature (OCT) is a new investigation in a single investigation of the second se		
INTRODUCTION	• Optical Concrete Tomography (OCT) is a non-invasive imaging		
	the noting OCT uses rays of light to measure noting! this has		
	Octival and the second se		
	• Optical concrete tomography anglography (OCTA) can image the		
	retinal vasculature in vivo, without the need for contrast dye. OCTA		
	was developed as an extension of OCT imaging. OCTA technology		
	chility among rating was also been imaging modelities to individually		
	visualize each retinal playus		
	Detinal Nerra Eilers Lever (DNEL) enclusio in an acceptial nert of		
	• Reunal Nerve Fibre Layer (RNFL) analysis is an essential part of the glaugeme evaluation. The DNEL thickness is calculated as the		
	distance between the internal limiting membrane and the outer		
	houndary of the PNEL PNEL analysis plays a major role in		
	glaucoma management allowing for earlier treatment to reduce the		
	risk of seision loss		
SCOPE	The manual will be nonformed by a minile and Assistant Medical		
SCOL	• The procedure will be performed by a privileged Assistant Medical Officer (AMO)		
	• All patients requiring the procedure for diagnosis monitoring of		
	disease progression and quantifying response to treatment.		
SPECIFIC	• To quantifying response to treatment		
OBJECTIVE	• To identify the abnormalities of the structure of the retina		
	• To measure retinal thickness		
	• To analyse the retinal nerve fibre layers		
	• To evaluate disorder of ontic nerve		
	• To evaluate the anatomy of specific vascular layers of the retina		
	• To evaluate the anatomy of specific vascular layers of the retina.		

## OPTHALMOLOGY



WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Review photographic request, confirm area of interest.</li> <li>Explain to the patient the indication of the procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card</li> <li>Referral letter</li> </ul>
Prepare Instruments / Equipment / Medication	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		Medication     i. Topical     anaesthesia eye     drop     ii. Dilating eye     drops.
	<ul> <li>Make sure OCT machine works perfectly.</li> <li>Select correct lens.</li> <li>Enter patient demographic information into</li> </ul>		<ul> <li>OCT machine</li> <li>Patient appointment card.</li> </ul>
Prepare Patient	<ul> <li>Capture software.</li> <li>Verify correct patient.</li> <li>Confirm adequate dilatation.</li> <li>Inform the patient</li> </ul>	Manual Arahan Kerja	<ul><li>Patient appointment card.</li><li>Dilating eye drop</li></ul>
	about the procedure.		

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	<ul> <li>Position patient's</li> </ul>		
	head on the		
	headrest.		
Perform the	<ul> <li>Ask patient</li> </ul>	Manual Arahan	
Procedure	permission to start.	Kerja	
	1		
	Steps Perform		
	1) Choose settings as		<ul> <li>OCT camera</li> </ul>
	per required OCT /		
	RNFL / optic nerve		
	head, macula /		
	anterior segment /		
	OCTA.		
	2) Establish fixation		
	with external or		
	internal fixation		
	device.		
	3) Align illumination		
	beam within pupil		
	(manual/automated).		
	4) Focus on		
	designated field of		
	view.		
	5) Use astigmatic		
	correction device if		
	available/needed.		
	6) Capture images as		
	required.		
	/) Review images for		
	quality, correct		
	artifacts and adjust		
	settings accordingly.		
Health Education	• Care of metabolic		
	• Care of metabolic		
	i Compliance to		
	n. Compliance to medication		
	ii Compliance of		
	follow up		
	iii. Compliance to		
	treatment		
Documentation	Record procedure		Procedure book /
	1		census.

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Verify pregnancy status (female).</li> <li>Verify underlying liver diseases.</li> <li>Review photographic request, confirm area of interest</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
	<ul> <li>Ensure written consent has been taken.</li> <li>Explain to the patient the indication of the procedure.</li> </ul>		• Signed consent form
Prepare Equipment / Dye / Medication	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		Medication     i. Topical     anaesthesia eye     drop.     ii. Dilating eye drop.
	<ul><li>Verify correct dye.</li><li>Check dye expiry date.</li></ul>		• Indocyanine Green (ICG) for Injection USP 25mg
	• Prepare disposable items.		<ul> <li>Disposable items</li> <li>i. 5ml syringe.</li> <li>ii. Needle 21G.</li> <li>iii. Sterile water for injection.</li> <li>iv. Syringe filter (0.2 micron)</li> </ul>

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	<ul> <li>Make sure angiographic machine works perfectly.</li> <li>Select correct lens.</li> </ul>		<ul> <li>Retinal angiographic machine.</li> <li>Preferred camera lens.</li> </ul>
	• Enter patient demographic information into capture software.		• Patient appointment card / record
	ICG Preparation Step 1) Reconstitute with 5ml of sterile water for injection. 2) Shake well at least for 3 minutes. 3) Withdrawn the constituents from the vial through sterile syringe filter (0.2 micron)		
Prepare Patient	• Verify correct patient.	Manual Arahan Kerja	• Patient appointment card / record
	• Confirm adequate dilatation.		• Dilating eye drop.
	• Ensure functioning peripheral intravenous line.		• Intravenous cannula 18G-20G.
	<ul> <li>Inform patient of procedures, dye to be administered, and potential side effects.</li> <li>Position patient's head on the buildent</li> </ul>		
	<ul> <li>Position patient for procedure with arm extended.</li> </ul>		

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Perform the	• A als motions	Manual Araban	
Dro coduro	• Ask patient	Vania Vania	
Flocedule	permission to start.	кегји	
	Store Daufama 1		
	1) A direct act in an		D atima
	1) Adjust settings		• Ketina
	IOF ICGA.		angiographic
	2) Engage exciter		machine
	and barrier filters.		• Preferred camera
	3) Set flash power.		lens.
	4) Establish fixation		
	with external or		
	internal fixation		
	device.		
	5) Use joystick to		
	align illumination		
	beam within pupil		
	of eye of interest.		
	6) Focus on		
	designated field of		
	view.		
	7) Begin to inject the		<ul> <li>2-5ml ICG dye.</li> </ul>
	ICG dye.		
	8) Start timer		
	concurrent with the		
	administration of		
	ICG dye.		
	9) Begin pre-		
	planned		
	photographic		
	sequence.		
	10) Early transit		
	capture rate of one		
	frame per second		
	of posterior pole or		
	area of interest		
	until about 40		
	seconds.		
	11) Use lateral shift		
	of joystick to		
	obtain sequential		
	stereo pairs.		
	12) Capture		
	posterior pole		
	photos of fellow		
	eye.		
	13) Follow with		
	peripheral survey		
	fields of transit eye		
	if necessary.		

	14) Monitor and		
	assess the patient's		
	response to the		
	procedure.		
	15) Perform mid-		
	phase photographs		
	of posterior pole at		
	2-4 minutes post		
	injection		
	16) Perform late		
	phase photographs		
	up to 30 minutes		
	post injection.		
	increase flash		
	setting or camera		
	gain settings for		
	adequate late		
	exposure.		
Health Education	Observe side		
	effects or		
	discoloration of		
	skin especially on		
	injection site.		
	Advice patient to		
	go to emergency		
	denartment		
	immediately if any		
	complication		
	occurs		
Documentation	Record procedure		Procedure book /
Documentation	• Record procedure		
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FUNDUS FLUORESCEIN ANGIOGRAPHY (FFA)			
INTRODUCTION	Fundus Fluorescein Angiography (FFA) is an invasive procedure for examining the circulation of retina blood flow. Fluorescein dye is injected into a vein in the arm/hand. As dye passes through the blood vessels of the eye, photographs are taken to record the blood flow in the retina.		
SCOPE	<ul> <li>The procedure will be performed by privileged Assistant Medical Officer (AMO)</li> <li>All patients indicated for the procedure</li> </ul>		
SPECIFIC	• The identify abnormality of ration airculation		
SI ECIFIC	• To identify abnormality of retina circulation		
OBJECTIVE	• To identify choroidal neovascularisation.		
	• To identify retinal vessel abnormality.		
	• To identify retina-choroidal inflammatory condition		
	• To aid in the diagnosis of chorioretinal inflammatory disease.		
	<ul> <li>To monitor the progression of the disease</li> </ul>		
	• To quantifying response to treatment.		

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OPTHALMOLOGY



WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter.</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify allergy status</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient appointment card / record.

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	<ul> <li>Verify pregnancy status (female).</li> <li>Verify underlying liver diseases.</li> <li>Review latest Renal Profile status.</li> <li>Review photographic request, confirm area of interest.</li> </ul>	
	<ul> <li>Ensure written consent has been taken.</li> <li>Verify correct procedure.</li> <li>Verify correct site.</li> <li>Explain to the patient the indication of the procedure.</li> </ul>	• Signed consent form
Prepare Instruments / Equipment / Medication / Dye	• Make sure emergency trolley and oxygen tank is ready to use.	• Updated emergency trolley & oxygen tank.
	• Prepare Fluorescein dye.	• Fluorescein injection USP.
	<ul> <li>Prepare medication for adverse reaction.</li> <li>Check dye and medication expiry date.</li> </ul>	<ul> <li>Medication <ol> <li>Topical <ul> <li>anaesthesia eye</li> <li>drop</li> </ul> </li> <li>Dilating eye drop.</li> </ol></li></ul> <li>Metoclopramide <ul> <li>HCL 10mg.</li> </ul> </li> <li>the Chlorpheniramine <ul> <li>Maleate 4mg.</li> <li>Hydrocortisone <ul> <li>200mg.</li> </ul> </li> </ul></li>
	• Prepare disposable items.	<ul> <li>Disposable items</li> <li>i. Intravenous cannula 18-20G.</li> <li>ii. 3ml / 5ml syringe.</li> </ul>

	<ul> <li>Make sure angiographic machine works perfectly.</li> <li>Enter patient demographic information into capture software.</li> </ul>		<ul><li>iii. Needle 21G.</li><li>iv. Vomit bowl/bag.</li><li>Retinal angiographic machine.</li></ul>
	• Select correct lens.		<ul> <li>Preferred camera lens.</li> </ul>
	<u>Fluorescein Dye</u> <u>Preparation Step</u> 1) Withdraw 2-5ml Fluorescein dye as per needed.		
Prepare Patient	• Verify correct patient.	Manual Arahan Kerja	• Patient appointment card / record
	• Confirm adequate dilatation.		• Dilating eye drop.
	• Ensure functioning peripheral intravenous line.		• Intravenous cannula 18G-20G.
	<ul> <li>Inform patient of procedures, dye to be administered, and potential side effects.</li> <li>Position patient's head on the headrest</li> <li>Position patient for procedure with arm extended.</li> </ul>		
Perform the Procedure	• Ask patient permission to start.	Manual Arahan Kerja	



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<ul> <li><u>Steps Performed</u></li> <li>1) Adjust settings for fluorescein angiography.</li> <li>2) Engage exciter and barrier filters.</li> <li>3) Set flash power.</li> <li>4) Establish fixation with external or internal fixation device.</li> <li>5) Use joystick to align illumination</li> </ul>		<ul> <li>Retinal angiographic machine</li> <li>Preferred camera lens.</li> </ul>
<ul> <li>align illumination beam within pupil of eye of interest.</li> <li>6) Focus on designated field of view.</li> <li>7) Begin to inject the</li> </ul>		
<ul><li>8) Start timer concurrent with the administration of fluorescein dye.</li></ul>		• 2-5ml fluorescein dye as per needed.
<ul><li>9) Begin pre- planned photographic sequence.</li><li>10) Early transit</li></ul>		
frame per second of posterior pole or area of interest until about 40 seconds.		
<ol> <li>Use lateral shift of joystick to obtain sequential stereo pairs.</li> <li>Capture posterior pole</li> </ol>		
	<ul> <li><u>Steps Performed</u> <ol> <li>Adjust settings <ul> <li>for fluorescein</li> <li>angiography.</li> </ul> </li> <li>Engage exciter <ul> <li>and barrier filters.</li> </ul> </li> <li>Set flash power.</li> <li>Establish fixation <ul> <li>with external or</li> <li>miternal fixation</li> <li>device.</li> </ul> </li> <li>Use joystick to <ul> <li>align illumination</li> <li>beam within pupil</li> <li>of eye of interest.</li> </ul> </li> <li>Focus on <ul> <li>designated field of</li> <li>view.</li> </ul> </li> <li>Begin to inject the fluorescein dye.</li> <li>Start timer <ul> <li>concurrent with the</li> <li>administration of</li> <li>fluorescein dye.</li> </ul> </li> <li>Begin pre- <ul> <li>planned</li> <li>photographic</li> <li>sequence.</li> </ul> </li> <li>Early transit <ul> <li>capture rate of one</li> <li>frame per second</li> <li>of posterior pole or</li> <li>area of interest</li> <li>until about 40</li> <li>seconds.</li> </ul> </li> <li>Use lateral shift <ul> <li>of joystick to</li> <li>obtain sequential</li> <li>stereo pairs.</li> </ul> </li> </ol></li></ul>	Steps Performed1) Adjust settings for fluorescein angiography.2) Engage exciter and barrier filters.3) Set flash power.4) Establish fixation with external or internal fixation device.5) Use joystick to align illumination beam within pupil of eye of interest.6) Focus on designated field of view.7) Begin to inject the fluorescein dye.8) Start timer concurrent with the administration of fluorescein dye.9) Begin pre- planned photographic sequence.10) Early transit capture rate of one frame per second of posterior pole or area of interest until about 40 seconds.11) Use lateral shift of joystick to obtain sequential stereo pairs.12) Capture posterior pole photos of fellow

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eye. 13) Follow with peripheral survey fields of transit eye

if necessary. 14) Monitor and assess the patient's

	response to the	
	procedure.	
	15) Respond to any	
	adverse reactions	
	auverse reactions	
	experienced by the	
	patient.	
	16) Perform mid-	
	phase photographs	
	of posterior pole at	
	2-4 minutes post	
	injection.	
	17) Perform late	
	phase photographs	
	at 7-10 minutes	
	post injection,	
	increase flash	
	setting or camera	
	gain settings for	
	adequate late	
	exposure.	
Health Education	• Urine orange.	
	vellow or red in	
	color is normal	
	within 72 hours	
	Observe	
	discoloration of	
	skin aspecially on	
	skill especially on	
	injection site.	
	• Monitor side	
	effects such as	
	itchiness, urticaria	
	and bronchospasm.	
	<ul> <li>Advice patient to</li> </ul>	
	go to emergency	
	department	
	immediately if any	
	complication	
	occurs	
Documentation	<ul> <li>Record procedure</li> </ul>	<ul> <li>Procedure book /</li> </ul>
		census.

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INSERT	INSERTION, REMOVAL AND CARE OF EYE PROSTHESIS			
INTRODUCTION	The cosmetic appearance of the person who has had an enucleation can			
	be greatly improved by fitting of an artificial eye. An ocular prosthesis,			
	artificial eye or glass eye is a type of craniofacial prothesis that replaces			
	an absent natural eye following an enucleation, evisceration or orbital			
CODE	exenteration.			
SCOPE	• The procedure will be performed by a privileged Assistant Medical			
	Officer (AMO).			
SPECIFIC	An patient who using eye prostnesis.     To advante			
OBJECTIVE	• To educate i Proper technique of insertion eve prosthesis			
obolicii i	ii. Proper technique of removal eve prosthesis			
	iii. Proper care of eye prosthesis			
WORKFLOW				
	Start Tack			
	Receive patient			
	Assess / verify patient /			
	correct site			
	×.			
	No			
	Fit for No			
	Procedure?			
	Vec			
	i es 🗸			
	Prepare equipment /			
	medication			
	Prepare patient			
	Perform the procedure			
	Perform the procedure			
	Health Education			
	Documentation			
	End Task			

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WORK INSTRUCTIO	N		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter, record book / census</li> </ul>
Assess / verify patient / correct site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Explain to the patient the indication of the procedure.</li> <li>Short history of nature injury.</li> <li>Ensure verbal consent has been taken</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
Prepare Equipment / Medication	<ul> <li>Prepare appropriate storage container</li> <li>Prepare solutions.</li> <li>Prepare disposable item.</li> <li>Verify correct eye prosthesis.</li> </ul>		<ul> <li>Clean storage container</li> <li>Solutions <ol> <li>Antiseptic</li> <li>Sterile water</li> </ol> </li> <li>Disposable item <ol> <li>Disposable</li> <li>dressing set</li> </ol> </li> <li>Boxes of eye prosthesis</li> </ul>
Prepare Patient Perform the Procedure	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient comfortably.</li> <li>Wash hand and gloving.</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i> Manual Prosedur Kerja/Arahan Kerja	• Patient record

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**Q** 

	Insertion	
	• Clean the eye	Sterile water
	prosthetis	
	• Insert the eye	<ul> <li>Eye prosthesis</li> </ul>
	prosthesis to the	
	superior fornics	
	then retract the	
	lower lid to ensure	
	the prothesis sit in	
	the inferior fornix	
	Removal	
	• Gently pull the	
	lower evelid down	
	using the index	
	finger as this will	
	help to see the	
	bottom edge of	
	eye prosthesis	
	• Allow the eye	Clean storage
	prosthesis to slide	container
	out from the lower	
	lid with the help	
	of index finger	
	Prosthesis Care	
	Rinse the eye	
	prosthesis with	
	water (running tap	
	water or distilled	
	water)	
	• Wash all sides of	
	the eye prosthesis	
	• Let air dry, do not	
	use any cloth that	
	can leave particles	
	on eye prosthesis	
	• Place neatly in a	
	container and	• Clean storage
	store in safe place	container
	(recommended to	
	use prosthesis all	
	the time)	
Health Education	• Do not use alcohol	
	or corrosive	
	liquids to clean the	
	prosthesis	

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OF/

Documentation	<ul> <li>Motivate to use the prothesis all the time</li> <li>Consider to remove the prothesis if develop any discharge and eye discomfort</li> <li>Clean prothesis when necessary (eye discharge, grittiness sensation)</li> <li>Seek attention if persistent symptoms (indication for new eye prothesis or polishing)</li> </ul>	Procedure book /
Documentation	Record procedure	• Procedure book / census.

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PRE-OPERATIVE COUNSELLING			
INTRODUCTION	Pre-operative counselling is a procedure designed to educate the		
	patient about the upcoming operation, ensuring awareness of pre-		
	operative preparation and post-operative care.		
SCOPE	• The procedure will be performed by a privileged Assistant Medical		
	Officer (AMO).		
	• All patients planned for ophthalmic surgery.		
SPECIFIC	• Ensure the patient and family members have a clear understanding		
OBJECTIVE	of the procedure's indication.		
	• Ensure the patient and family members have a clear understanding		
	of pre-operative care.		
	• Ensure the patient and family members have a clear understanding		
	of post-operative care.		
WORKFLOW	Start Task		
	Receive Patient		
	Assess / Verify Patient /		
	Correct Site / Allergy Status		
	Fit for No		
	Procedure		
	Ves		
	Prepare Equipment		
	Prenare Patient		
	Perform the		
	Procedure		
	×		
	Yes		
	Complication Refer to Doctor.		
	No		
	Health Education		
	Documentation		
	End Task		

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WORK INSTRUCT	WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT		
Receive Patient	• Register patient particulars in the record book	Malaysian Patient Safety Goal 2.0 (MPSG)	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>		
Assess / Verify Patient / Correct Site	<ul> <li>Verify the correct patient.</li> <li>Verify the correct procedure.</li> <li>Verify the correct eye.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0			
Prepare Equipment	<ul> <li>Prepare a conducive environment for counselling.</li> <li>Prepare counselling materials.</li> <li>Review clinical notes.</li> <li>Compare with the OT booking list.</li> </ul>		<ul> <li>A designated room.</li> <li>Adequate lighting and ventilation."</li> <li>Furnished with suitable furniture (e.g., a round table, comfortable chairs for patients and relatives).</li> <li>Counselling materials (pamphlets, charts, audio-visuals, videos/CDs on surgery, etc., if applicable).</li> <li>Appropriate materials for demonstration (e.g., lid care, eye drops/ointment, eye model, intraocular lens model, etc.).</li> </ul>		
Prepare Patient	• Inform the patient about the details of the procedure.	Manual Arahan Kerja	• Patient record		



#### OPTHALMOLOGY

Perform the	Provide general	Manual Arahan	Counselling
Procedure	information on	Kerja	materials
	surgery.		(pamphlets, charts,
	<ul> <li>Inform the patient</li> </ul>		audio visuals,
	about the		video/CD on
	scheduled		surgery etc.)
	operation date.		<ul> <li>Appropriate</li> </ul>
	• Determine		materials for
	anaesthesia type		demonstration
	(local, regional, or		(e.g., lid care, eye
	general) for the		drops/ointment,
	upcoming		eye model,
	procedure through		intraocular lens
	discussion with the		model etc.)
	patient.		
	• Ascertain the type		
	of admission		
	(inpatient / day-		
	care)		
	• Patient for under		
	general anaesthesia		
	/ Monitored		
	Anaesthetic Care		
	(MAC)		
	i. Confirm general		
	anaesthetic clinic		
	appointment.		
	Admit early to		
	designated ward.		
	ii. Fast from midnight		
	the night before.		
	ii. Bring all		
	medication		
	during		
	admission.		
	• Patient for local		
	anaesthesia		
	i Admit on same		
	day to day care		
	centre/ward		
	ii May take light		
	breakfast.		

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#### OPTHALMOLOG



	- Use clean water to		
	wash face (wudhu'		
	are allowed) wine		
	with clean towel		
	- Avoid shampoo		
	entering eyes		
	- Instil eve drops as		
	instructed		
	- Sleep with eve		
	shield on		
	- To follow post on		
	position as advised		
	by doctor (Normal		
	praver gesture are		
	allowed)		
	- Advice on sign /		
	symptom of any		
	complication If any		
	to seek immediate		
	medical attention		
Health Education	Droporo the notiont		
Treatin Education	• Trepare the patient		
	physically for the		
	operation		
	Continuo toking all		
	• Continue taking an		
	medications as		
	• Advise patient to		
	go to eye clinic		
	during office hour		
	and emergency		
	department		
	immediately after		
	office hour if any		
	complication		
	occurs.		
	Maintain good		
	hygiene for eye		
-	care.		
Documentation	Record procedure	Manual Arahan	Counselling book /
		Kerja	Eye Card/ census.

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
	• Ensure written consent has been taken.		• Signed consent form
Prepare Instruments / Equipment / Medication	• Make sure Diode Laser machine works perfectly.		Diode Laser machine
	• Make sure TSCPC probe functioning and fibre optic cable is not kinked.		• ISCPC probe and fibre optic cable
	• Prepare supplementary instruments.		• Supplementary instruments i. Safety goggle ii. Eye speculum iii. Cataract towel
	• Prepare disposable items.		• Disposable items i. Dressing set ii. Syringe with 26G
	• Prepare solutions.		needle. iii. Sterile glove • Solutions i. Antiseptic lotion
	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>ii. Balanced Salt Solution (BSS)</li> <li>Medication <ul> <li>Topical anaesthesia eye drop</li> <li>ii. Lignocaine HCL 2%</li> </ul> </li> <li>iii. Bupivacaine HCL 0 5%</li> </ul>
			0.370

	Medication Preparation Step 1) Withdraw both Lignocaine HCL		iv. Topical antibiotics eye drop
	2% and Bupivacaine HCL with ratio 1:1		
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in in a comfortable position and inform if any discomfort during and after procedure.</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient appointment card / record
	• Clean and drape patient's eye with clean / aseptic technique		<ul> <li>Antiseptic solution</li> <li>Eye Drape / cataract towel</li> </ul>
Assist the Procedure	<ul> <li>Wash hand and gloving.</li> <li>Assist doctor and wait for the next instructions.</li> </ul>		• Sterile glove
	Steps (Perform by doctor) 1) Doctor to confirm TSCPC parameters.		<u>Steps (Hand over by</u> <u>AMO) to doctor</u> 1) Check machine setting.
	2) Apply topical eye drop.		2) Topical anaesthesia eye drop
	<ul> <li>3) Put eye speculum.</li> <li>4) Give local anaesthetic injection at peribulbar area (peribulbar block).</li> </ul>		<ul> <li>3) Eye speculum</li> <li>4) Local anaesthesia mixture in a syringe with 26G needle.</li> </ul>
	5) Initiate the laser at the target area.		5) TSCPC Probe

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	i.	i.	İ.
	6) Note the starting		6) Irrigation of
	and finishing time.		cornea using BSS
	7) Observe patient's		7) Observe
	level of pain.		
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
	guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
Health Education	• Observe any		
	bleeding /		
	inflammation.		
	<ul> <li>Observe pain.</li> </ul>		
	• Come to the		
	emergency		
	department		
	immediately if any		
	complication		
	occurs.		
	<ul> <li>Follow up</li> </ul>		
	compliance		
Documentation	<ul> <li>Record procedure</li> </ul>	Manual arahan	• Procedure book /
		kerja	census.

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure written consent has been taken.</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment /	<ul> <li>Check function of laser machine</li> <li>Ensure lenses used in the dedicated delivery system is cleaned and ready for use</li> <li>Refer to specific laser machine user manual for details</li> </ul>	<ul> <li>Laser safety protocol</li> <li>Policies &amp; Procedures on Infection prevention and Control, MOH, 2018 (3rd edition)</li> </ul>	<ul> <li>Laser Console</li> <li>Appropriate lenses as per doctor's preference</li> <li>Appropriate goggles</li> <li>Laser Delivery Systems</li> <li>Binocular indirect ophthalmoscope</li> <li>Slit Lamp</li> <li>Laser probes</li> </ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Sit patient at the laser machine and ensure their position is comfortable</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i>	• Patient record
Assist the Procedure	• Ensure all present wear protective laser goggles	Guidance document on the safe use of medical and dental lasers, Pekeliling KPK, rujukan (19)	• Appropriate goggles

	<ul> <li>Ensure laser hazard light is switched on</li> <li>Assist doctor and wait for the next instructions</li> <li>Observe patient throughout procedure ensuring patient's comfort and correct position maintained</li> <li>At the completion of treatment, the laser should be in "stand-by" mode and the power reduced to zero</li> </ul>	dlm.KKM-153 PCG/FP/GL(3) jld.2, (15 Jan 2016)	
Cleaning Instruments	• Clean the lens after laser procedure done	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guideline.
Health Education	<ul> <li>Advise patient to take analgesic if needed.</li> <li>Observe side effects / complications</li> <li>Advice patient to go to eye clinic during office hours or emergency department immediately after office hours if any complication occurs.</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	• Record procedure	Manual prosedur Kerja/arahan kerja	<ul> <li>Procedure book / census.</li> </ul>
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WORK INSTRUCT	TION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Record patient's	Malaysian Patient	• Patient appointment
	information in the	Safety Goal 2.0	card / record
	record book.		• Record book /
			census
Assess / Verify	Verify correct patient	Manual Arahan	• Patient appointment
Patient / Correct Site	<ul> <li>Verify correct site</li> </ul>	Kerja	card / record
/ Allergy status	• Verify correct procedure		
	<ul> <li>Verify allergy status</li> </ul>		
	• Ensure written consent	Malaysian Patient	<ul> <li>Signed consent form</li> </ul>
	has been taken	Safety Goal 2.0	
Prepare Instruments	• Prepare sterile		Epilation forceps
/ Equipment /	instruments		
Medication	• Verify correct		<ul> <li>Medication</li> </ul>
	medication		i. Topical anesthesia
	• Check medication		1
	expirv date		
Prepare Patient	Verify correct patient	Malaysian Patient	Patient record
1	• Inform the patient about	Safety Goal 2.0	
	the procedure	2	
	• Place patient in a	Manual Arahan	
	comfortable position	Kerja	
	and inform if any	-	
	discomfort during and		
	after procedure		
Assist the Procedure	1) Wash hand and gloving		Disposable glove
	2) Assist doctor and wait		1 0
	for the next instructions		
	Steps (Perform by doctor)		Steps (Hand over by
			AMO) to doctor
	1) Instill topical		1) Drop topical
	anaesthetic eye drops		anesthesia
	into the lower fornix.		
	2) Cleanse the eye with		2) Normal saline
	cotton swabs soaked in		0.9% Solution
	normal saline solution.		
	3) Wash and dry your		3) Observe
	hands.		
	4) Don gloves.		4) Observe
	5) Ask the patient to look		5) Observe
	up or down, depending		

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	on the location of the		
	misdirected eyelashes		
	(upper or lower eyelid,		
	respectively).		
	6) Evert the affected		6) Observe
	evelid gently to clear		0) 0050170
	the lashes from the		
	7) Grip the misdirected		/) Epilation forceps
	lash firmly with		
	epilation forceps near		
	the hair follicle.		
	8) Pull the lash firmly and		8) Cotton swab
	swiftly along the axis		
	to remove it from the		
	follicle.		
	9) Ensure that the lash is		9) Cotton bud (if
	not broken halfway		necessary)
	and completely		
	removed from the root.		
	10)Repeat the same		10) Observe
	process to remove		,
	remaining misdirected		
	lashes		
	11)Clean the eve and		11) Dron antibiotic
	apply eve		ri) Drop andoione
	drons/ointment if		
	noodod		
Classing and	Refer to Cleaning and	Dolining and	Defen to Cleaning and
Starilization of	starilization	Proceedures and	starilization
Stermization of		Flocedure on	stermzation of
Microsurgery	interosurgery instruments	Infection	microsurgery
Instruments	guideline	Prevention and	instruments guideline.
		control, MOH,	
		$2018$ ( $3^{rd}$ edition)	
Health Education	• Instruct the patient on		
	eye care and medication		
	use.		
	• Advise the patient to		
	observe for potential		
	complications, such as		
	abnormal lash growth.		
	• Advice patient to go to		
	eye clinic during office		

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	hour and emergency		
	department immediately		
	after office hour if any		
	complication occurs		
	• Emphasize the		
	importance of following		
	up for proper care.		
Documentation	<ul> <li>Record procedure</li> </ul>	Manual Arahan	Procedure book /
		Kerja	census.

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WORK INSTRUCTIO	WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT		
Receive Patient	• Register patient particulars in record book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>		
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient appointment card / record		
Prepare Instruments / Equipment/Medication	<ul> <li>Prepare complete syringing set</li> <li>Verify correct medication.</li> <li>Check medication expiry date</li> </ul>	Policies & Procedures on Infection & Prevention and Control. MOH.2018 (3rd Edition)	<ul> <li>Syringing Set <ul> <li>Nettleship</li> <li>punctum dilator</li> <li>ii.Lacrimal</li> <li>cannula</li> </ul> </li> <li>Disposable items <ul> <li>Syringe 3cc</li> <li>Cotton swab</li> </ul> </li> <li>Solution <ul> <li>Normal saline</li> <li>0.9%</li> </ul> </li> <li>Medication <ul> <li>Topical</li> <li>Anaesthesia</li> </ul> </li> </ul>		
Prepare Patient	<ul> <li>Inform the patient about the procedure.</li> <li>Position patient in supine on the couch or sitting on the chair.</li> <li>Clean patient's eye with sterile solution.</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual</i> <i>Arahan Kerja</i>	Patient record		
Assist the Procedure	<ul> <li>Wash hand and gloving.</li> <li>Assist doctor and wait for the next instructions</li> </ul>		• Sterile glove		

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Steps (Perform by	Steps (Hand over by
doctor)	AMO) to doctor
1) Prepare 3ml syringe	1) 3ml syringe,
with normal saline	normal saline,
mounted with	lacrimal cannula
lacrimal cannula	
2) Instil topical	2) Local anaesthetic
anaesthetic eve drops	eve drop
into the lower fornix	5 1
3) Ask patient to look	3) Observe
upwards and	•)
outwards (away from	
the nose), maintain	
this gaze until the	
procedure is over	
4) Gently pull down the	4) Observe
lower evelid to	.)
expose the lower	
punctum	
5) Insert Nettleship	5) Nettleship
dilator into the lower	punctum dilator
punctum (vertically	punteun unuter
downward- 2mm)	
and gently rotate the	
dilator	
6) Apply slight lateral	6) Observe
traction on the lower	0) 0000110
lid and gently insert	
the dilator in more	
horizontal direction	
towards nasally	
7) Remove the dilator	7) Observe
and hold the syringe	.,
mounted with	
lacrimal cannula	
8) Gently insert the tip	8) Observe
of cannula in the	,
lower punctum	
9) Again, apply slight	9) Observe
lateral traction to the	,
lower lid and insert	
the cannula along the	
canaliculus	
10)Continuously insert	10)Observe
until a "stop" is	,
reached and	
determine whether	
the stop is soft or	
hard	

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	<ul> <li>11)Hard stop- the cannula is within the lacrimal sac and touching against the lacrimal bone (patent canalicular system)</li> <li>Soft stop-the cannula is within the canaliculus and pushing against the spongy outer walls of the lacrimal sac suggesting the blockage within the</li> </ul>		11)Observe
	canalicular system 12)Withdraw the cannula from the stop about 2 mm and slowly inject the fluid		12)Observe
	13)Simultaneously, look at the upper punctum and observe for any regurgitation		13)Observe
	14)Regurgitation at upper and lower punctum indicate blockage at common canaliculus		14)Observe
	15)Ask patient to notify if feel the sensation of salty taste at throat		15)Observe
	16)The lacrimal passage is patent if fluid is felt at the back of the throat		16)Observe
	17)Repeat steps in upper punctum		17)Observe
Cleaning And Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guideline.	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guideline.





Health Education	• Educate patient on how to perform tear duct massage, eve dressing		
	and apply eye drops.		
	eye clinic during office		
	hour and emergency department		
	immediately after		
	complication occurs.		
	• Emphasize on follow up compliance.		
Documentation	Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particular in record book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient's appointment card / record</li> <li>Referral letter</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient's appointment card / record
Prepare Instruments / Equipment / Medication	<ul> <li>Prepare complete &amp; sterile eye dressing set.</li> <li>Prepare supplementary instruments.</li> </ul>		<ul> <li>Sterile eye dressing set</li> <li>Supplementary instruments         <ol> <li>Glass rod</li> <li>Retractor</li> <li>Angle poised lamp / equivalent.</li> </ol> </li> </ul>
	<ul> <li>Prepare solutions.</li> <li>Prepare disposable item.</li> </ul>		<ul> <li>Solutions <ul> <li>Normal Saline</li> <li>0.9%</li> </ul> </li> <li>Disposable item <ul> <li>Cotton buds</li> <li>Eye pad</li> <li>Gauze</li> <li>Glove</li> </ul> </li> </ul>
	<ul><li>Verify correct medication.</li><li>Check medication expiry date.</li></ul>		Medication     i. Local     Anaesthetic eye     drops     ii. Topical Antibiotic
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in comfortable position.</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient record</li> <li>Comfortable chair / couch</li> </ul>

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Assist the Procedure	<ul> <li>Chaperon assistance if necessary.</li> <li>Wash and dry hands</li> <li>Assist doctor and wait for the next instructions.</li> </ul>	Manual Work Instructions (If available)	<ul><li>Hand soap</li><li>Glove</li></ul>
	<ul> <li>instructions.</li> <li><u>Steps (Perform by</u> <u>doctor)</u></li> <li>Apply local anaesthetic eye drops.</li> <li>Open the patient's eye gently and if necessary, use retractors.</li> <li>Wipe off the pseudo- membrane with a cotton bud gently.</li> <li>Wipe off any bleeding with sterile wet gauze if present. If necessary, apply gentle pressure.</li> <li>Repeat procedure till all pseudo- membrane are removed.</li> <li>Gently break any adhesions present by sweeping the</li> </ul>		Steps (Hand over by         AMO)         1) Local anaesthetic eye drops         2) Retractor         3) Cotton bud         4) Sterile wet gauze         5) Cotton bud         6) Glass rod
	<ul><li>glass rod from side to side (rodding)</li><li>7) Repeat rodding and apply local anaesthetic eye drops if necessary.</li></ul>		<ol> <li>Local anaesthetic eye drops</li> </ol>



	<ul> <li>8) Clean the eye and instil antibiotic eye ointment.</li> <li>9) Cover patient's</li> </ul>		<ul><li>8) Topical Antibiotic</li><li>9) Eye pad</li></ul>
	eye if necessary 10) Observe patient for pain and bleeding for at least 5 minutes		10) Observe
Health Education	<ul> <li>Advice patients to go to eye clinic during office hours and emergency department immediately after office hour if any complication occurs.</li> <li>Compliance to medication</li> <li>Emphasize follow up compliance.</li> </ul>		
Documentation	• Record procedure	Manual arahan kerja	• Procedure book / census.

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WORK INSTRUC	CTION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent</li> </ul>	<i>Manual Arahan</i> <i>Kerja</i> Malaysian Patient Safety Goal 2.0	Patient appointment card / record     Signed consent form
Prepare Instruments / Equipment / Medication	<ul> <li>Prepare complete Toilet and Suture set</li> <li>Prepare supplementary instruments</li> </ul>		Toilet and suture set     *Refer Appendix 1
	• Prepare disposable items.		<ul> <li>Disposable items <ul> <li>Disposable items</li> <li>Disposable dressing set</li> <li>3ml sterile syringe</li> <li>Sterile needle 23G,26G</li> <li>6-0 absorbable/non absorbable sutures (Cutting edge needle)</li> <li>Adhesive plaster</li> <li>Sterile eye pads</li> </ul> </li> </ul>
	<ul> <li>Prepare solutions</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>Solutions <ol> <li>Antiseptic solution</li> <li>Normal saline</li> </ol> </li> <li>Medications <ol> <li>Injection lignocaine 2%</li> <li>Antibiotic ointment</li> </ol> </li> </ul>
Prepare patient	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify consent.</li> <li>Explain the purpose of and the procedure to patient and / or relatives</li> </ul>	Malaysian Patient Safety Goal 2.0	Procedure Record Book.

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		r	The second se
	• Position the patient		
	comfortably in		
	supine position		
Aggisting		Anghan Vonia	
Assisting	• Ask patient permission	Aranan Kerja	
procedure	to start.	manual	
	Steps of procedure		
	1) Aseptic technique is		1) Antiseptic solution
	used.		<i>1)</i> 1 milespie seraiten
	2) Put on gloves		
	3) Clean the		
	natient's eve		
	4) Drane the Patient		
	5) Inspect the extent		2) Cataract towel
	5) inspect the extent		
	of the faceration		3) Conjunctival tooth
	6) Remove any		forcep and cotton bud
	foreign body if		_
	present		
	7) Undermine skin		
	if tissue loss is		
	significant		
	8) Expose the skin		4) Injustion lignopoins
	laceration edges		4) injection inglocalite $20$ ( $(0, 1, \dots, 1, 1, 1)$
	and suture with		2%, 6/0 absorbable
	6/0 pylop suture		and non-absorbable
	0/0 Hylon suture		suture
	9) Clean the eye		5) Antibiotic ointment
	and apply eye		and sterile eye pad
	ointment		
	10) Clean the		
	instruments		
	used for		
	procedure.		
	11) Wash hands		
	after procedure		
	12) Observe patient		
	for pain /		
	discomfort		
Health Education	• A driged nation to go		
	• Advised patient to go		
	to eye clinic during		
	office hours or		
	emergency department		
	immediately after		
	office hour if any		
	complication occurs.		
	Compliance to		
	medication and follow		
	up appointment.		
Documentation	Record procedure	Arahan Keria	Procedure book /
2. ocumentation	- Record procedure	manual	
1	1	mannan	consus.



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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in the record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card/record</li> <li>Referral letter.</li> <li>Record book/census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify the correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	
Prepare Equipment / Medication	• Make sure slit lamp works perfectly.		• Slit lamp.
	• Prepare disposable items.		<ul> <li>Disposable items</li> <li>Disposable dressing set</li> <li>Fluorescein strips</li> <li>Iml/3ml syringe</li> <li>Needle 26G/27G</li> <li>Sterile gauze</li> <li>Sterile cotton bud</li> <li>Eye pads (if indicated)</li> <li>Eye shield</li> <li>Micropore tape</li> </ul>
	• Prepare solutions.		• Solutions i. Normal saline
	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		Medication     i. Topical     anaesthesia eye drops     ii. Topical     antibiotics eye drops
Prepare Patient	<ul> <li>Explain the purpose of the procedure to the patient and / or relatives</li> <li>Position the patient comfortably in a</li> </ul>	Manual Arahan Kerja	

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	sitting position at the slip lamp or in a supine position on the bed.	
Assist the Procedure	• Instill topical anesthetic eye drops into the lower fornix. • Wosh hands and	Topical anaesthesia eye drops     Storila glava
	<ul> <li>wash hands and gloves using an aseptic technique.</li> <li>Examine the patient's eye to locate the foreign body.</li> <li>Assist the doctor and wait for the next instructions</li> </ul>	<ul> <li>Sterile glove</li> <li>Surgical face mask</li> </ul>
	Steps (Perform by doctor) 1) Corneal foreign body Use a sterile needle 26G/27G to pick up and remove FB. Stain the cornea with fluorescein to determine the extent of epithelial defect	<u>Steps (Hand over by</u> <u>AMO)</u> 1) 1cc Syringe with 26/27G needle and fluorescein strip
	<ul><li>2) Apply antibiotic drops/ointment</li><li>3) Apply eye pad/shield (if indicated)</li></ul>	<ul><li>2) Chloramphenicol</li><li>0.5%</li><li>3) Eye pad/shield</li></ul>
Health Education	<ul> <li>Monitor for redness or any infection</li> <li>Compliance to medication.</li> </ul>	
Documentation	Record procedure	Procedure book / census.



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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in the patient's record book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card/record</li> <li>Referral letter.</li> <li>Record book/census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify the correct site.</li> <li>Verify correct procedure.</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	Patient appointment card/record
Prepare Instruments / Equipment	• Prepare slit lamp machine.		• Slit lamp machine.
	• Prepare supplementary instruments.		<ul> <li>Supplementary instruments</li> <li>i. Vannas scissors</li> <li>ii. Suture-tying forceps</li> <li>iii. Kidney dish</li> </ul>
	• Prepare Disposable item		• Disposable item i. Sterile cotton bud
	<ul> <li>Verify correct medication.</li> <li>Check the medication expiry date.</li> </ul>		<ul> <li>Medication <ul> <li>Topical <ul> <li>anaesthesia eye</li> <li>drops</li> </ul> </li> <li>Topical <ul> <li>antibiotics eye drops</li> </ul> </li> </ul></li></ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Position the patient comfortably at a slit lamp or supine on the bed.</li> </ul>	Manual Arahan Kerja	
Assist the Procedure	• Instill topical anesthetic eye drops into the lower fornix.		• Topical anaesthesia eye drops



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	• Assist doctor and wait for the next instructions		
	Steps (Perform by doctor) 1) Cut the suture		<u>Steps (Hand over by</u> <u>AMO)</u> 1) Vannas scissor
	2) Remove the sutures using		2) Suture-tying forceps
	forceps. 3) Apply antibiotic eye drops or		3) Topical antibiotics eye drops
Cleaning And	ointment.	Dallalas aud	Defente Cleaning and
Sterilization of Microsurgery Instruments	sterilization of microsurgery instruments guidelines.	Protection and Procedure on Infection Prevention and Control, MOH,	sterilization of microsurgery instruments guidelines.
		2018 (3 <sup>rd</sup> edition)	
Health Education	<ul> <li>Importance of taking prescribed medication.</li> <li>Encourage patients to seek emergency care if necessary.</li> <li>Emphasize follow- up compliance</li> </ul>		
Documentation	Record procedure		Procedure     book/census.

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# OPTHALMOLOG

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# Section B - Clinic Minor OT Procedures

	SUBCONJUCTIVA INJECTION			
INTRODUCTION	Subconjunctival injection of ocular drugs is a procedure to administer			
	drugs under bulbar or palpebral conjunctiva. This allows the drugs to			
	bypass the conjunctival epithelium barrier and deliver high drug			
	concentrations to ocular structures.			
SCOPE	• The procedure will be assisted by a privileged Assistant Medical			
	Officer (AMO).			
	• All patient requiring subconjunctiva injection as indicated			
SPECIFIC	• For treatment of lesion in the cornea, sclera, anterior uvea and			
OBJECTIVE	vitreous			
WORKFLOW	Start Task			
	Receive Patient			
	Assess / Verify Patient /			
	Correct Site / Allergy Status			
	×			
	Fit for No			
	Procedure			
	Yes			
	Prepare Equipment /			
	Instruments/ Medication			
	Prepare Patient			
	Assist the			
	Procedure			
	Yes			
	Complication Refer to Doctor.			
	No			
	Cleaning and Sterilization of			
	Microsurgical Instruments			
	Health Education			
	Documentation			
	End Task			
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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book	Malaysian Patient Safety Goal 2.0 (MPSG)	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> </ul>	Manual Arahan Kerja Malaysian Patient Safety Goal 2.0	Patient     appointment card /     record
	• Ensure written consent has been taken.		• Signed consent form.
Prepare Instruments / Equipment / Medication	<ul> <li>Prepare complete &amp; sterile cleaning set.</li> <li>Prepare supplementary</li> </ul>		<ul> <li>Eye dressing set</li> <li>Supplementary instruments</li> </ul>
	instrument.		i. Conjunctiva Forceps ii. Eye speculum iii. Cotton bud/eye sponge
	• Disposable items		<ul> <li>Disposable items <ol> <li>Glove</li> <li>Cotton bud</li> <li>Syringe 3ml</li> <li>Syringe 5ml for <ul> <li>water cornea</li> <li>Needle 20g</li> <li>Needle 26g</li> </ul> </li> <li>Wedication to be <ul> <li>injected.</li> </ul> </li> </ol></li></ul>
	• Prepare solutions.		• Solutions i. Antiseptic solution ii. Normal saline
	• Verify correct		Medication
	medication.		1. Topical

	<ul> <li>Check medication</li> </ul>		Anaesthesia
	expiry date.		ii. Topical
			Antibiotics
Prepare Patient	<ul> <li>Verify correct</li> </ul>	Malaysian Patient	<ul> <li>Patient record</li> </ul>
	patient.	Safety Goal 2.0	
	• Inform the patient		
	about the procedure.	Manual Arahan	
	• Position patient in	Kerja	
	supine on the table		
	• Instil topical		T. 1
	anaesthesia.		• Topical
	• Clean and drape		Anesthesia
	patient's eve with		• Eye Drape
	aseptic technique		• Antiseptic solution
Assist the	Wash hand and		• Sterile glove
Procedure	gloving.		• Plastic apron
	Assist doctor and		1
	wait for the next		
	instructions.		
	Steps (Perform by		Steps (Hand over by
	doctor)		AMO) to doctor
	1) Syringe out		1) Syringe 3ml and
	medication.		20g needle
	2) Change to 26g		2) 26g needle
	needle to inject.		
	3) Hold the		3) Conjunctiva
	conjunctiva.		forceps
	4) Inject medication.		4) Syringe with
			medication
	5) Apply pressure at		5) Cotton bud/eye
	injection site.		sponge
	6) Antibiotic		6) Gutt. Antibiotic
Cleaning And	Refer to Cleaning and	Policies and	Refer to Cleaning
Sterilization of	sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection	microsurgery
Instruments	instruments guideline.	Prevention and	instruments
		control, MOH,	guideline.
		2018 (3rd edition)	

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Health Education	<ul> <li>Eye care</li> <li>Medication adherence</li> <li>Monitor for side effects/complications.</li> <li>Advise patients to go to the eye clinic during office hours and emergency department immediately after office hours if any complication occurs.</li> <li>Emphasize on follow up compliance.</li> </ul>	Manual Araban	• Proceedure heads /
Documentation	• Record procedure	Manual Arahan Kerja	• Procedure book / census.

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WORK INSTRUCTION			
RK PROCESS	STANDARD	REQUIREMENT	
gister patient ticulars in record ok / census book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census book</li> </ul>	
rify correct ient rify correct site rify correct ocedure rify allergy status sure written asent has been en	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Consent form</li> </ul>	
rify correct dication eck medication biry date		<ul> <li>Dressing Set</li> <li>Sub tenon injection Set. <ol> <li>Sub tenon needle</li> <li>Non tooth conjunctiva forceps</li> </ol> </li> <li>Blunt tip conjunctiva scissors</li> <li>Eye speculum</li> <li>Solutions <ol> <li>Antiseptic</li> <li>Disposable item</li> <li>Eye drape</li> <li>Syringe 3cc/5cc (as per request)</li> <li>23G needle</li> <li>Cotton bud (if necessary)</li> <li>Medication</li> <li>Topical</li> </ol> </li> </ul>	
	sure written isent has been pare complete & rile sub tenon ection set rify correct dication eck medication biry date	sure written Safety Goal 2.0 Issent has been en pare complete & rile sub tenon ection set rify correct dication eck medication biry date <u>ication</u> <u>aration Step</u>	

	and 23G needle with		iii. cortical steroid
	aseptic technique		iv. Mesenchymal stem
	• Then mounted the		cell
	sub tenon needle on		
	that syringe		
Prepare Patient	• Inform the patient	Malaysian Patient	Patient record
1	about the procedure	Safety Goal 2.0	
	• Position patient in	5	
	supine on the couch	Manual Arahan Kerja	
	• Clean and drane	, , , , , , , , , , , , , , , , , , ,	<ul> <li>Antiseptic</li> </ul>
	natient's eve with		• Eye Drape
	asentic technique		
Assist the Procedure	• Hand washing and		• Starila alava
Assist the Procedure	• Hand washing and		• Sterne glove
	gioving using aseptic		
	storilo attiro		
	sterile attire		
	• Assist doctor and		
	instructions		
	Instructions		Stong (Hand over by
	Store (Deaforms by		AMO)
	destar)		AMO
			1)Evo spoulum
	1) An eyelid		T)Eye specululi
	speculum is		
	inserted to		
	improve access		
	and prevent		
	2) Asking the nationt		2)Observe
	2) Asking the patient		2)0050170
	side as medication		
	2) A small tent of the		3)Non tooth
	5) A small tent of the		conjunctiva
	Tonon conquile is		forcens Blunt tin
	reliand with a pair		conjunctiva
	of hunt the		scissors
	or orunt up		50155015
	conjunctiva		
	toothed		
	conjunctiva		
	forcons		
	approximately 5		
	approximately 5-		
	10 mm from the		

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inferior-nasal	
limbus	
4) A small incision is	4)Blunt tip
made in the tissue	conjunctiva
using a pair of	scissors
blunt tip	
conjunctiva	
scissors, exposing	
the sclera below	
5) The blunt ended	5)Sub tenon cannula
sub-Tenon's	
cannula can then	
be inserted, with	
the syringe of	
local anaesthetic	
attached, and	
passed posteriorly,	
following the	
curvature of the	
globe, until its tip	
is perceived to	
passed the equator	
6) Anaesthetic is	6)Medication as
injected slowly:	prepared
smaller volumes	
(e.g., 2ml	
lignocaine) are	
typically adequate	
for analgesia,	
larger volumes	
(e.g., 3-5ml,	
sometimes more)	
if akinesia is also	
needed	
7) On injection of the	7)Observe
local anaesthetic,	
little resistance is	
usually	
encountered and	
most of the	
solution should	
disappear behind	

	<ul> <li>the globe resulting in slight proptosis</li> <li>8) If resistance is encountered, the cannula can be withdrawn slightly and repositioned</li> <li>9) Clean the eye and instil eye drops/ointment as ordered</li> <li>10) Clean the instruments used for procedure</li> <li>11) Wash hands after procedure</li> </ul>		8)Observe 9)Observe
Cleaning And	Refer to Cleaning and	Policies and	Refer to Cleaning and
Sterilization of	sterilization of	Procedure on	sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments guideline	and control, MOH, 2018 (3 <sup>rd</sup> edition)	instruments guideline.
Health Education	<ul> <li>Observe side complications (bleeding/swelling)</li> <li>Advice patient to go to eye clinic during office hours or emergency department immediately after office hours if any complication occurs</li> <li>Emphasize on follow up compliance</li> </ul>	Sofo Support Sofo Life	
Documentation	<ul> <li>Record procedure</li> </ul>	Sate Surgery Sate Life	Procedure book /
		(335L)	census.
			<ul> <li>SSSL Form</li> </ul>

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Pavan-Langston, D., & Langston, D. P. (2008). *Manual of Ocular Diagnosis and therapy*. Wolters Kluwer Health/Lippincott Williams & Wilkins.

INTRODUCTION	Intravitreal injections are a procedure to enables highly targeted drug
	therapy, maximizing therapeutic drug delivery to the posterior pole
	while minimizing systemic toxicity.
SCOPE	• The procedure will be performed by a privileged Assistant Medical
	Officer (AMO).
	• All patient requiring targeted drug for specific ocular condition
SPECIFIC	• Intravitreal Injection of antibiotics or other drugs is performed in the
OBJECTIVE	treatment of specific ocular conditions.
	<ul> <li>Macula oedema</li> </ul>
	<ul> <li>Choroidal neovascularization</li> </ul>
	<ul> <li>Intraocular infection</li> </ul>
	<ul> <li>Intra inflammation</li> </ul>
	○ Intra tumour
	• Retinal detachment

#### INTRAVITREAL INJECTIONS

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive	• Register patient	Malaysian Patient	Patient
Patient	particulars in record book	Safety Goal 2.0	appointment card /
			record
			• Record book /
			census
Assess / Verify	<ul> <li>Verify correct patient</li> </ul>	Manual Arahan	• Signed consent
Patient /	<ul> <li>Verify correct site</li> </ul>	Kerja	form
Correct Site /	• Verify correct procedure		
Allergy status	<ul> <li>Verify allergy status</li> </ul>	Safe Surgery Safe	
	• Ensure written consent	Life (SSSL)	
	has been taken		
		Malaysian Patient	
		Safety Goal 2.0	
Prepare	• Prepare intravitreal		<ul> <li>Intravitreal</li> </ul>
Instruments /	instruments		instruments
Equipment /	<ul> <li>Prepare solutions</li> </ul>		i. Eyelid speculum
Medication	• Verify correct		ii. Calipers
	medication		<ul> <li>Disposable items</li> </ul>
	• Check medication expiry		i. Syringe
	date		ii. Needle 26/30g
			iii. Cotton bud
	Medication Preparation		<ul> <li>Solutions</li> </ul>
	Step		i. Antiseptic
	1) Anti VEGF		<ul> <li>Medication</li> </ul>
	2) Antibiotic		i. Intravitreal
	a) Vancomycin		medication
	2mg/0.1ml		a) Vancomycin
	i) The vial		2mg/0.1ml
	contains 500mg		b) Ceftazidime
	vancomycin		2mg/0.1ml
	powder		c) Amphotericin
	ii) Reconstitute the		В
	vial with 10 ml		0.005mg/0.1
	of normal saline		ml
	iii) Withdraw 4ml		d) Ganciclovir
	(200mg) and		2mg/0.1ml
	add 6ml of		e)
	normal saline		11. Topical
	iv) Take 0.1ml		Anesthesia
	(2mg)		111. Topical
			Antibiotics

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b)	Ceftazidime	
	2mg/0.1ml	
	i) The vial	
	contains 1g	
	ceftazidime	
	powder	
	ii) Reconstitute the	
	vial with 10ml	
	of normal saline	
	/ water 101	
	111) Withdraw Iml	
	(100mg) and	
	add 4ml of	
	normal saline /	
	water for	
	injection	
	iv) Take 0.1ml	
	(2mg)	
3) Ar	ntifungal	
a)	Amphotericin B	
	0.005mg/0.1ml	
	i) The vial	
	contains 50mg	
	of	
	Amphotericin B	
	powder	
	ii) Reconstitute the	
	vial with 10 ml	
	of water for	
	injection	
	iii) Withdraw 1ml	
	(0.5 mg) and	
	add 9ml of	
	sterile water for	
	injection Mix	
	mjeenon. MIX	
	well	
	(0.005)	
4) 4	(0.005mg)	
4) Ar		
a)	Ganciclovir	
	(0.1ml/2mg)	

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	i) Take 1 vial of		
	500mg		
	Ganciclovir and		
	add 5ml water		
	for injection		
	(100mg/ml)		
	ii) Withdraw 1ml		
	ii) white and add the laf		
	and add 4mi of		
	(11) withdraw		
	0.1ml (2mg)		
	5) Antimetabolite/chemot		
	herapy		
	a) Prepared by		
	pharmacy		
	6) Anti-inflammatory		
	i) Dexamethasone		
Prepare Patient	• Confirm adequate	Malaysian Patient	<ul> <li>Patient record</li> </ul>
	dilation	Safety Goal 2.0	<ul> <li>Eye Drape</li> </ul>
	• Inform the patient about		<ul> <li>Antiseptic</li> </ul>
	the procedure	Manual Arahan	
	• Position patient in supine	Kerja	
	on the couch		
	• Clean and drape patient's		
	eye with aseptic		
	technique		
	Wash hand and gloving		• Sterile glove
	• Assist doctor and wait for		8
	the next instructions		
	the next mst detions		Steps (Hand over by
	Stans (Parform by doctor)		AMO) to doctor
	<u>Steps (renorm by doctor)</u>		<u>Alwoy to doctor</u>
Assist the	1) Place natient in sunine		1) Observe
Procedure	nosition		2) Topical
Tiocedure	2) Tanical anasthasia		2) Topical
	2) Topical anaestnesia		allestitesia drop
	(wait 10-13 seconds		
	placing		
	povidone-iodine)		3) Anti septic
	3) Antiseptic drops; ask		solution
	patient to blink		
	multiple times to		
	spread the povidone-		
	iodine		

	4) Place sterile eyelid		4) Eyelid speculum
	speculum		
	5) Rinse the antiseptic out		5) Observe
	of the patient's eye		<i>c</i> ,
	6) Mark the location of		
	injection: 3.5mm for		6) Calipers
	pseudophakia, 4.0 mm		
	for phakic patients		
	7) Have the patient look		/) Observe
	away from the		
	injection site. For		
	example, if injecting		
	the right eye in the		
	supratemporal		
	quadrant, ask the		
	patient to look down		
	and to the left		8) Svringe 1ml
	8) Hold syringe in		-7 5 6
	dominant hand, and a		
	cotton bud in the non-		
	dominant hand		9) Needle 30g as
	9) Insert the needle at the		ordered
	marked site in a		
	smooth and single		
	motion, aiming for the		10) Cotton bud
	mid-vitreous cavity		10) Cotton bud
	10) Insert the needle about		
	1/2 length in (to make		
	sure you are in the		
	vitreous cavity and not		
	in the suprachoroidal		
	space)		11) Observe
	11) As you remove the		
	needle, cover the		
	injection site with a		
	cotton bud that is in		
	your non-dominant		12) Antibic (1
	hand		12) Antibiotic drop
	12) Drop antibiotic if		
	necessary		
Cleaning And	Refer to Cleaning and	Policies and	Refer to Cleaning
Sterilization of	sterilization of	Procedure on	and sterilization of

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Microsurgery	microsurgery instruments	Infection Prevention	microsurgery
Instruments	guideline	and control, MOH,	instruments
		2018 (3rd edition)	guideline.
Health	• Reassure patients that		
Education	they may see floaters		
	which are due to air		
	bubbles or the medication itself		
	• Review endophthalmitis,		
	retinal haemorrhage and		
	retinal detachment		
	symptoms and precautions		
	• Observe side effects / complications		
	<ul> <li>Taking medication</li> </ul>		
	• Advice patient to go to		
	eye clinic during office		
	hours or emergency		
	department immediately		
	after office hours if any		
	complication occurs		
	• Emphasize on follow up		
	compliance		
Documentation	<ul> <li>Record procedure</li> </ul>	Manual Arahan	• Procedure book /
		Kerja	census.

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WORK INSTRUC	WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	• Register patient	Malaysian Patient	• Patient appointment	
	particulars in record book	Safety Goal 2.0	card / record	
			<ul> <li>Record book / census</li> </ul>	
Assess / Verify	<ul> <li>Verify correct patient</li> </ul>	Manual Arahan	• Patient appointment	
Patient / Correct	<ul> <li>Verify correct site</li> </ul>	Kerja	card / record	
Site / Allergy	Verify correct procedure		<ul> <li>Safe Surgery Safe Life</li> </ul>	
status	• Verify allergy status	Safe Surgery Safe	(SSSL) Form	
	• Ensure written consent	Life (SSSL)		
	has been taken			
		Malaysian Patient	<ul> <li>Signed consent form</li> </ul>	
		Safety Goal 2.0	-	
Prepare	<ul> <li>Prepare instruments</li> </ul>		<ul> <li>Instruments</li> </ul>	
Instruments /			i. Colibri Forceps	
Equipment /			ii. Conjunctiva Forceps	
Medication	<ul> <li>Prepare disposable items</li> </ul>		<ul> <li>Disposable items</li> </ul>	
			i. 15-degree knife	
			ii. Needle 26G	
			iii. Rycroft cannula 27G	
			iv. Fluorescein strip	
	<ul> <li>Prepare solutions</li> </ul>		<ul> <li>Solutions</li> </ul>	
			i. Antiseptic	
	<ul> <li>Prepare medication</li> </ul>		<ul> <li>Medication</li> </ul>	
	• Verify correct		i. Topical	
	medication		Anaesthesia	
	<ul> <li>Check medication expiry</li> </ul>		ii. Topical Steroid	
	date		iii. Topical	
			Antibiotics	
			iv. Ophthalmic	
			Viscosurgical	
			Devices (OVD)	
	Medication Preparation			
	<u>Step</u>			
	1) Local Anaesthesia			
	a. Withdraw			
	Lignocaine 2%		<ul> <li>Iml syringe</li> </ul>	
	0.1ml using syringe		• Needle 26G	
	1ml			
	2) Antibiotic Cefuroxime			
	0.1mg			
			<ul> <li>Syringe 10ml</li> </ul>	

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::: OPTHALMOLOGY 

	i. The vial contains		• Syringe 1ml
	750mg cefuroxime		• Needle 21G
	powder		Normal salina
	ii Reconstitute the vial		
	with 7.5 ml normal		
	saline		
	iii Withdraw 0.1ml		
	(0.1mg) using 1ml		• Syringe Iml
	(0.111g) using 1111		• Air filter
	3) Cas perfluero propono		
	$(C_2 E_3)$ / subbur		
	(C3F8) / Sulphur		
	a) With draw 0.2ml and		
	a) withdraw 0.5ml gas		
	air filter		
Prepare Patient	<ul> <li>Verify correct patient</li> </ul>	Malaysian Patient	Patient record
	• Confirm adequate	Safety Goal 2.0	• Eye Drape
	dilatation		<ul> <li>Antiseptic</li> </ul>
	• Inform the patient about	Manual Arahan	-
	the procedure	Kerja	
	Position patient in supine		
	on the bed		
	• Clean and drape patient's		
	eve with aseptic		
	technique		
Assist the	Wash hand and gloving		• Sterile glove
Procedure	Assist doctor and wait for		· Sterne glove
1100000000	the next instructions		
	the next mstructions		Steps (Hand over by
	Stong (Parform by doctor)		$\frac{Steps}{AMO}$ to doctor
	<u>Steps (Perform by doctor)</u>		<u>AWO / to doctor</u>
	1) Tonical anaesthesia		1) Topical apaesthesia
	(wait 10-15 seconds		1) Topical anaestitesia
	hefore placing		
	antisentic)		2) Antisentic
	2) Anticentia drenau estr		2) Antiseptie
	2) Antiseptic drops, ask		
	multiple times to correct		
	the antisentic		
	2) Plane et 1 11		2) Evalid manufum
	3) Place sterile eyelid		<i>5)</i> Eyena speculum
	speculum		(1) Observe
	4) Rinse the antiseptic out		4) Observe
	of the patient's eye		

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	5) Make incision at the side port using 15- degree knife		5) 15-degree knife
	<ul><li>6) Place Rycroft cannula 27G on syringe</li><li>7) Inject the medication to</li></ul>		6) Rycroft cannula 27G
	the intracameral		7) Observe
	<ol> <li>Assess any leakage to the cornea. Fluorescein strip if necessary</li> </ol>		8) Fluorescein strip (if necessary)
	<ul><li>9) Assess IOP digitally</li><li>10)Remove all instrument.</li></ul>		9) Observe
	Clean up the site 11)Drop antibiotic (if		10) Clean up the site.
	necessary)		11) Antibiotic (if necessary)
Cleaning And	Refer to Cleaning and	Policies and	Refer to Cleaning and
Sterilization of	sterilization of	Procedure on	sterilization of
Microsurgery	microsurgery instruments	Infection Prevention	microsurgery instruments
Instruments	guideline	and control, MOH,	guideline.
		2018 (3rd edition)	
Health Education	<ul> <li>Care of the wound</li> </ul>		
	• Positioning may need in		
	intracameral of gases		
	<ul> <li>Taking medication</li> </ul>		
	• Observe side effects /		
	complications		
	• Advice patient to go to eye clinic during office		
	hour and emergency department immediately		
	after office hour if any		
	complication occurs		
	• Emphasize on follow up		
Documentation	Record procedure	Manual Arahan	• Procedure book /
	- necora procedure	Kerja	census.

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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patients' appointment card / record.</li> <li>Record book / census</li> <li>Referral letter</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Ensure written consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patients' appointment card / record.</li> <li>Signed consent form</li> </ul>	
Prepare Instruments / Equipment / Medication	<ul> <li>Prepare complete &amp; sterile I&amp;C set.</li> <li>Prepare supplementary equipment.</li> <li>Prepare disposable items.</li> <li>Prepare solutions.</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>I&amp;C Set</li> <li>*Refer Appendix 2</li> <li>Cataract towel</li> <li>Disposable items <ul> <li>Surgical blade</li> <li>size 11</li> <li>Cotton bud</li> <li>Eye pad</li> <li>Solutions</li> <li>Antiseptic</li> <li>solution</li> </ul> </li> <li>Medication <ul> <li>Local anaesthesia</li> <li>injection</li> <li>Topical</li> <li>anaesthesia eye</li> <li>drop</li> <li>Topical</li> <li>antibiotic eye</li> <li>drop</li> </ul> </li> </ul>	
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in comfortable position</li> <li>Clean and drape patient's eye with</li> </ul>	Malaysian Patient Safety Goal 2.0	• Eve Drape	

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	clean / aseptic		<ul> <li>Antiseptic solution</li> </ul>
	technique		
Assist the Procedure	<ul> <li>Wash hand and</li> </ul>		<ul> <li>Sterile glove</li> </ul>
	gloving.		
	<ul> <li>Assist doctor and</li> </ul>		
	wait for the next		
	instructions.		
	Steps (Perform by doctor)		Steps (Hand over by AMO) to doctor 1) Local Anaesthesia
	anaesthesia at		(Ini, Lignocaine
	chalazion area.		2% in 2ml)
	2) Clamp the chalazion site.		2) Chalazion clamp
	3) Make an incision.		3) Blade size 11
	4) Scrape out the contents of the chalazion.		4) Curette
	5) Clean the wound site.		5) Cotton bud
	6) Place antibiotic		6) Topical
	ointment at the		Antibiotics
	incision site.		
	7) Cover patient's eye with eye pad.		7) Eye pad
Cleaning And	Refer to Cleaning and	Policies and	Refer to Cleaning
Sterilization of	sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection	microsurgery
Instruments	instruments guideline.	Prevention and	instruments
		control, MOH,	guideline.
		2018 (3 <sup>rd</sup> edition)	

Health Education	<ul> <li>Wound Care- Observe any bleeding / complications.</li> <li>Advised patients to go to eye clinic during office hours or emergency department immediately after office hour if any complication occurs.</li> <li>Compliance to medication and follow up appointment</li> </ul>	
Documentation	Record procedure	<ul> <li>Procedure book / census.</li> <li>Patient appointment card / record</li> </ul>

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WORK PROCESS	STANDARD	REQUIREMENT
• Register patient particulars in the record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card/record</li> <li>Referral letter</li> <li>Record book/census</li> </ul>
<ul> <li>Verify correct patient.</li> <li>Verify the correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> </ul>	Malaysian Patient Safety Goal 2.0	• Patient appointment card/record
• Ensure written consent has been taken.		• Signed consent form.
• Make sure the microscope machine or loupe works perfectly.		Microscope     machine or loupe
• Prepare supplementary instruments		<ul> <li>Supplementary instruments</li> <li>i. Eye speculum</li> <li>ii. Calliper</li> <li>iii. Corneal forceps</li> <li>iv. Dermatology punch</li> </ul>
• Prepare disposable items		<ul> <li>Disposable items         <ol> <li>Dressing set</li> <li>Cotton buds and sponge spears</li> <li>Surgical eye drape/cataract towel</li> <li>Fluorescein strips</li> <li>Syringe 1cc</li> <li>Syringe 5cc</li> <li>Rycroft cannula</li> <li>27G needle</li> <li>Disc (if</li> </ol> </li> </ul>
	<ul> <li>WORK PROCESS</li> <li>Register patient particulars in the record book</li> <li>Verify correct patient.</li> <li>Verify the correct site.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken.</li> <li>Make sure the microscope machine or loupe works perfectly.</li> <li>Prepare supplementary instruments</li> <li>Prepare disposable items</li> </ul>	WORK PROCESSSTANDARD• Register patient particulars in the record bookMalaysian Patient Safety Goal 2.0• Verify correct patient. • Verify the correct site. • Verify correct procedure. • Verify allergy status • Ensure written consent has been taken.Malaysian Patient Safety Goal 2.0• Make sure the microscope machine or loupe works perfectly.Prepare supplementary instruments• Prepare supplementary instrumentsPrepare disposable items

			x. Bandage Contact Lens (BCL)
	• Prepare solutions		<ul> <li>Solutions</li> <li>i. Povidone Iodine 5%</li> <li>ii. Balance salt solution (BSS)</li> </ul>
	<ul> <li>Verify correct medication.</li> <li>Check the medication expiry date.</li> </ul>		<ul> <li>Medication         <ol> <li>Topical                  anaesthesia eye                  drop                  ii. Topical                  antibiotics eye                  drops</li> </ol> </li> </ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Explain the purpose of and the procedure to patient and/or relatives</li> <li>Position the patient comfortably in supine position</li> <li>Ensure good lighting</li> </ul>	Manual Arahan Kerja	
Assist the Procedure	<ul> <li>Wash hand and gloving.</li> <li>Assist the doctor and wait for the next instructions</li> </ul>	Manual Arahan Kerja	<ul> <li>Sterile glove</li> <li>Surgical face mask</li> </ul>
	Steps (Perform by doctor)1) Area cleaned and draped.2) Topical anesthesia is used.		Steps (Hand over by AMO) 1) Eye drape/cataract towel 2) Gutt Proparacaine
	3) Identify the perforation site with a fluorescence strip.		hydrocholoride 0.5% 3) Florescence strip

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	4) Measure the perforated area and thinning size.		4) Callipers
	5) Prepare the disc.		5) Dermatology punch
	6) Glue is syringed out and a drop of		6) Cyanoacrylate glue in 1cc
	glue is placed on the disc		syringe and disc
	7) Dry the site of the gluing area.		7) Sponge spears
	8) Glue with disc is applied to the site of		8) Observe
	9) Wait 10-20 seconds until the glue stabilized and		9) Observe
	dried 10) The Seidel test is		10) Fluorescent strip
	11) A BCL is applied		11) Bandage Contact Lens
Cleaning And Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guidelines.	Policies and Procedure on Infection Prevention and Control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guidelines.
Health Education	<ul> <li>Wash hands well when applying the medication</li> <li>Observe BCL in site</li> <li>Monitor for an eye infection</li> <li>Avoid rubbing</li> </ul>		
	eyes frequently		
Documentation	• Record procedure		• Procedure book / census.



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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card/record</li> <li>Referral letter</li> <li>Record book/census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure verbal consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	
Prepare Instruments / Equipment	• Prepare instrument.		• Kimura spatula
	<ul> <li>Prepare disposable items</li> <li>Verify correct medication.</li> <li>Check the medication expiry date.</li> </ul>		<ul> <li>Disposable items <ol> <li>Disposable</li> <li>Disposable</li> <li>dressing set</li> <li>Blood agar plate</li> <li>Chocolate agar</li> <li>Sabouraud</li> <li>dextrose agar</li> <li>Fastidious</li> <li>anaerobe agar</li> <li>Microscope slide</li> <li>Sterile swabs</li> <li>with transport</li> <li>medium</li> </ol> </li> <li>Viii. Needle 23G</li> <li>Medication <ol> <li>Topical</li> <li>anaesthesia eye</li> <li>drops</li> </ol> </li> </ul>
Prepare Patient	• Verify correct patient.	Manual Arahan Kerja	
	• Explain the purpose of and the procedure to patient and/or relatives		

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	• Position the patient	
	comfortably at the	
	slit lamp.	
Assist the Procedure	<ul> <li>Wash hands and</li> </ul>	
	wait for the next	
	instructions	
	Steps (Perform by	Steps (Hand over by
	doctor)	<u>AMO)</u>
	1) Instill topical	1) Proparacaine
	anesthetic eye	hydrochloride
	drops.	ophthalmic solution
		0.5%
	2) A Kimura spatula	2) Kimura spatula or
	or 26G needle is	26G needle
	used to scrape the	
	edge of the ulcer.	
	3) Needle 26G is	<ol><li>Four Agar plates</li></ol>
	used to collect	
	specimens for each	
	of the four agar	
	plates, using a	
	fresh needle 26G	
	every time.	
	4) Another new	4) Needle 26G and
	needle 26G is used	Glass microscope
	to deposit the	slide
	specimen onto the	
	center of a glass	
	microscope slide.	
	5) The area is	5) marker pen,
	circled, and the	sticker to label
	slide is labeled	specimens
	with the patient's	
	details.	
	6) Ensure that all	6) PER-PAT form
	specimens are	
	adequately labeled	
	and sent to	
	microbiology	
	immediately.	
	7) Complete a	
	microbiology	
	request form	
	providing details	
	of the patient's	
	provisional	
	diagnosis and	

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	current antimicrobials		
Cleaning And Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guideline.	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guidelines.
Health Education	<ul> <li>Advise patients on post-operative activities and restrictions.</li> <li>Instruct patients on proper administration of eye drops.</li> <li>Monitor for any potential adverse effects or complications</li> <li>Adherence to prescribed medication</li> <li>Encourage patients to seek emergency care if necessary.</li> <li>Emphasize follow- up compliance</li> </ul>		
Documentation	Record procedure		• Procedure book / census.

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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT	
Receive Patient	Register patient particulars in record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card/record</li> <li>Record book/census</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Ensure written consent has been taken.</li> </ul>	Malaysian Patient Safety Goal 2.0	• Signed consent form	
Prepare Instruments / Equipment / Medication	• Prepare complete & sterile dressing set.		• Dressing Set	
	• Prepare supplementary instruments		<ul> <li>Supplementary instruments</li> <li>i. Tooth Forceps</li> <li>ii. Non-tooth forcep</li> <li>iii. Needle holder</li> <li>iv. Straight scissors</li> </ul>	
	• Prepare solutions.		• Solutions i. Antiseptic solution ii. Normal saline	
	• Prepare disposable item.		<ul> <li>Disposable item</li> <li>Silk 4-0 suture</li> <li>3ml syringe</li> <li>iii. Sterile Needle</li> <li>23G &amp; 26G</li> <li>iv. Butterfly needle</li> <li>tubing</li> <li>v. Sterile gauze</li> <li>vi. Sterile cotton bud</li> <li>vii. Eye pads</li> </ul>	

	1		
	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>Medication <ol> <li>Topical <ul> <li>anaesthesia eye</li> <li>drops</li> </ul> </li> <li>ii. Local <ul> <li>anaesthesia</li> <li>iii. Ointment</li> <li>Antibiotics</li> </ul> </li> </ol></li></ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Explain the purpose of and the procedure to patient and / or relatives.</li> <li>Position the patient comfortably in supine position.</li> <li>Instil topical anaesthetic eye drops into the lower fornix.</li> <li>Clean and drape patient's eye with clean / aseptic technique</li> </ul>	Manual Arahan Kerja	
Assist the Procedure	<ul> <li>Hand washing and gloving using aseptic technique.</li> <li>Clean and drape patient's eye with aseptic technique</li> <li>Assist doctor and wait for the next instructions</li> </ul>		<ul><li>Surgical face mask</li><li>Sterile glove</li></ul>
	Steps (Perform by doctor) 1) Anaesthetize the central area of both the upper and lower eyelids with an injection of a few milliliters of local anesthetic (e.g. lidocaine 1–2% or bupivacaine 0.5%).		Steps (Hand over by <u>AMO</u> ) 1)3cc syringe with 23G needle to syringe out local anesthetic

	2) Prepare two		2) butterfly needle
	bolsters to prevent		tubing and straight
	the suture from		scissor
	cutting into the		
	skin.		
	3) Suture Silk 4.0 is		3) Suture 4.0 silk
	placed on the upper		with needle holder,
	and lower eye lid		tooth forcep, non-
	with the bolster to		tooth forcep and,
	allow secure		straight scissor
	closure of the lid		
	margins.		
	4) Antibiotic		4) Chloramphenicol
	ointment is placed		eye ointment
	over the site of		
	tarsormaphy		
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgerv	microsurgerv	Infection Prevention	microsurgerv
Instruments	instruments	and control, MOH,	instruments
	guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
	0		5
Health Education	<ul> <li>Monitor for pain,</li> </ul>		
	infections, and		
	swelling		
	<ul> <li>Apply antibiotic</li> </ul>		
	eye drops or		
	ointment.		
Documentation	<ul> <li>Record any</li> </ul>		<ul> <li>Patient record</li> </ul>
	complication		<ul> <li>Procedure book /</li> </ul>
			census.

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### Section C – Operation Room Procedures (Assisting in Ophthalmic Surgeries)

CLEANING AN	D STERILIZATION OF MICROSURGICAL INSTRUMENTS
INTRODUCTION	Ophthalmic surgical instruments are delicate. The instrument damage
	often occurs during assisting the surgeon and cleaning process.
	Therefore, meticulous handling and care of the instruments is essential.
	Sterilisation is a process that kills, deactivates or eliminates all forms
	of life and other biological agents. Methods of sterilisation include heat,
	chemical, irradiation, high pressure and filtration.
SCOPE	• The procedure will be performed by a privileged Assistant Medical
	Officer (AMO).
	• All used non sterile microsurgical instruments.
SPECIFIC	• To clean and sterilise microsurgical instruments
OBJECTIVE	· i o oloun una stormiso miorosurgiour mist amonto.
WORKFLOW	
	Start Task
	Statt Task
	↓ 
	Wear PPE
	▼
	Enzymatic Detergent Dilution
	↓
	Instrument Cleaning and Soaking
	↓
	Drying the Instruments
	Packaging Labelling and Storage
	r ackaging, Easening and Storage
	*
	End Task

WORK INSTRUCT	WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Wear PPE Enzymatic Detergent Dilution	<ul> <li>Wear proper Personal Protective Equipment (PPE) before handling contaminated instruments</li> <li>Dilute enzymatic detergent according to manufacturer's instruction</li> <li>Ensure to change diluted detergent</li> </ul>	Policies and Procedures on Infection Prevention and Control, MOH, 2018 Detergent Manufacture's Instruction	<ul> <li>Disposable gowning (plastic)</li> <li>Disposable glove</li> <li>Face shield / goggle</li> <li>Neutral pH enzymatic detergent</li> <li>Sterile water</li> </ul>	
	solution daily			
Instrument Cleaning and Soaking	<ul> <li>Hinged/ non- hinged instruments</li> <li>1) Instruments should be completely opened or disassembled in order to expose all parts of the instruments</li> <li>2) Fully open any hinged instruments for thorough cleaning</li> <li>3) Rub or scrub soiled area with brush and rinse</li> <li>4) Clean instruments using ultrasonic cleaner (if available)</li> <li>5) Soak rinsed instruments with neutral pH enzyme detergent</li> <li>6) Presoaked or rinsed instruments in contact with enzymatic detergent with sterile water</li> </ul>	Policies and Procedures on Infection Prevention and Control, MOH, 2018	<ul> <li>Soaking Tray x 2</li> <li>Neutral pH enzymatic cleaner</li> <li>Ultrasonic cleaner (if available)</li> <li>Sterile water</li> <li>Soft bristle brush</li> <li>Syringe</li> </ul>	

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	Lumened instruments 1) Flush instrument with lumen using sterile water and neutral pH enzyme detergent 2) Flush thoroughly to remove the debris and the ophthalmic viscoelastic totally to avoid any post- op reaction 3) Rinse instruments thoroughly that comes in contact with enzyme detergent with sterile water and followed by compressed air		
Drying the	Dry instruments	Policies and	• Dry, lint-free
Instruments	thoroughly and arrange in rigid container	Procedures on Infection Prevention and Control, MOH, 2018	towel
Packaging, Labelling and Storage	<ul> <li>Cover instrument with silicon tube</li> <li>Wrap instrument either individually or in sets</li> <li>Wrap container with two sheets of medical crepe paper or pack with medical plastic pouches</li> <li>Container wrapped with medical crepe paper is secured with autoclave tape</li> <li>Insert a steam indicator strip in the container (if available)</li> <li>Label package with staff's initial, date</li> </ul>	Policies and Procedures on Infection Prevention and Control, MOH, 2018	<ul> <li>Medical crepe paper</li> <li>Medical plastic pouch</li> <li>Steam indicator strip</li> <li>Autoclave tape steam indicator (if available)</li> <li>Autoclave machine (refer to OT staff)</li> <li>Designated shelves</li> <li>Suitable cupboard</li> </ul>

of autoclaving and	
location of storage	
Ready for	
autoclaving (refer to	
OT Staff)	
<ul> <li>Sterilised item must</li> </ul>	
be examined for	
any sign of wet	
packs (visible	
dampness, droplets,	
or puddled water),	
tear in packaging,	
or the seal is	
broken. If any of	
these signs occur.	
the package should	
be resterilised	
• Surgery set &	
instruments should	
not be stored on	
floors or windowsill	
<ul> <li>Designated shelves</li> </ul>	
• Designated sherves	
recommendable	
Prior to use surgery	
• Prior to use, surgery	
sets and instruments	
should be visually	
inspected for	
integrity and	
labelling	

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WORK INSTRUCTION						
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT			
Receive Patient	• Record the patient's particulars in the patient registration book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Patient's registration book</li> </ul>			
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation Theater (OT) list</li> <li>Signed consent form</li> </ul>			
Prepare Instruments / Equipment	<ul> <li>Prepare complete &amp; sterile EUA set</li> <li>Prepare disposable</li> </ul>		<ul> <li>EUA Set.</li> <li>i. Speculum</li> <li>ii. Conjunctiva forceps</li> <li>iii. Calipers</li> <li>Disposable item</li> </ul>			
	<ul> <li>Prepare disposable items</li> <li>Prepare correct medication</li> <li>Check medication expiry date</li> <li>Prepare equipment</li> </ul>		<ul> <li>Disposable item</li> <li>i. Cotton swab (if necessary)</li> <li>ii. Cotton bud (if necessary)</li> <li>Medication <ul> <li>Dilating eye drop</li> </ul> </li> <li>Binocular Indirect Ophthalmoscopy (BIO)</li> <li>Handheld tonometer</li> <li>A Scan (optional)</li> <li>B Scan (optional)</li> <li>Portable fundus camera (optional)</li> </ul>			
Prepare Patient	• Inform the patient / relatives about the procedure	Malaysian Patient Safety Goal 2.0	<ul><li>Patient record</li><li>Dilating eye drop</li></ul>			

	• Position patient in	Manual Arahan	
	sunine	Keria	
	• Clean nationt's ava	110.50	
4 1 . D 1	• Clean patient's eye		
Assist the Procedure	<ul> <li>Hand washing technique</li> <li>Assist doctor and wait for the next instructions</li> </ul>		
	<u>Steps (Perform by</u> <u>doctor)</u>		Steps (Hand over by AMO)
	1) Position the patient supine and allow the anesthesia team to administer medication to induce a deep sleep and monitor vital signs.		1) Observe
	2) Insert a sterile		2) Speculum
	<ul> <li>4) Perform a</li> </ul>		<ul> <li>3) Pass surgical instruments to the surgeon as needed during the procedure.</li> <li>a) Conjunctiva forceps</li> <li>b) Calipers</li> <li>c) Disposable items</li> <li>i. Cotton swab (if necessary)</li> <li>ii. Cotton bud (if necessary)</li> <li>iii. Medication (Dilating drop)</li> <li>iv. BIO</li> <li>v. Handheld tonometer</li> <li>vi. A Scan (optional)</li> <li>vii. B Scan (optional)</li> </ul>
	4) Perform a complete eye		4) Observe
	examination. 5) Remove all instruments and		5) Observe
	<ul><li>6) Drop antibiotic eye drops if necessary.</li></ul>		6) Drop medication as per request.



Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning and
Sterilization of	and sterilization of	Procedure on	sterilization of microsurgery
Microsurgery	microsurgery	Infection Prevention	instruments guideline.
Instruments	instruments	and control, MOH,	
	guideline	2018 (3rd edition)	
Health Education	Observe side		
	effects /		
	complications		
	<ul> <li>Taking medication</li> </ul>		
	• Advice patient to		
	go to eye clinic		
	during office hour		
	and emergency		
	department		
	immediately after		
	office hour if any		
	complication		
	occurs		
	• Emphasize on		
	follow up		
	compliance		
Documentation	Record procedure	Safe Surgery Safe	Procedure book / census.
		Life (SSSL)	SSSL Form

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OPTHALMOLOGY





WORK INSTRUCT	WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site.</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>	
Prepare Instruments / Equipment / Medication	<ul> <li>Prepare complete &amp; sterile Tapping set</li> <li>Prepare supplementary instruments</li> <li>Prepare solution</li> <li>Prepare Disposable item</li> <li>Medication</li> </ul>		<ul> <li>Tapping set: <ol> <li>Speculum</li> <li>Conjunctiva forceps</li> <li>Calliper</li> <li>Supplementary instruments: <ol> <li>Kidney dish</li> <li>Eye cleaning set</li> </ol> </li> <li>Solutions: <ol> <li>Povidone iodine</li> <li>Normal saline</li> </ol> </li> <li>Disposable item: <ol> <li>Eye drape</li> <li>Sterile gauze and cotton bud</li> <li>Sterile surgical glove</li> <li>Needle 21G and 26G</li> <li>Eye pad</li> <li>Medication:</li> <li>Topical anaesthesia</li> </ol> </li> </ol></li></ul>	
Prepare Patient	<ul> <li>Verify correct patient</li> <li>Inform the patient about the procedure</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	Patient record	

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	• Position patient in supine on the OT		• Antiseptic
	table		• Eva Drana
	<ul> <li>Clean and drape</li> </ul>		• Eye Drape
	patient's eye with		
	aseptic technique		
Assist the Procedure	<ul> <li>Wash and dry hand.</li> </ul>		<ul> <li>OT gown</li> </ul>
	• Wear gown & gloves		<ul> <li>Sterile glove</li> </ul>
	• Clean and drape the		Eye Drape
	eye		
	Steps (Perform by		Steps (Hand over by
	doctor)		$\frac{AMO}{1}$
	1) 2 units Syringe Iml		1) 2 sets of Iml
	and 2 units 30G		syringe and 30G
	2) Demonstration		needle 2) Observe
	2) Remove plunger		2) Observe
	(normagentagis) to the		
	(paracentesis) to the		
	3) Inject syringe to		3) Observe
	limbus to withdraw		5) 0030170
	the aqueous		
	4) Cotton bud is		4) Cotton bud
	passed to doctor to		.) couch cuu
	compress the wound		
	5) The specimen will		5) Agar plate and
	be collected and		Culture &
	send to lab for		Sensitivity bottle
	further investigation		,
	6) Apply eye pad		6) Eye pad
Cleaning And	Refer to Cleaning and	Policies and	Refer to Cleaning
Sterilization of	sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection	microsurgery
Instruments	instruments guideline	Prevention and	instruments
	-	control, MOH,	guideline
		2018 (3rd edition)	
Health Education	<ul> <li>Post-operative care</li> </ul>		
	<ul> <li>Positioning as</li> </ul>		
	indicated and		
	cleanliness of		
	surgical site		
	• Observe side effects		
	/ complications		
	<ul> <li>Medication</li> </ul>		
	compliance		
	• Emphasize on		
	follow up		
	compliance		

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Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census</li> </ul>
			<ul> <li>SSSL Form</li> </ul>

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	<ul> <li>Register patient</li> </ul>	Malaysian Patient	• Patient
	particulars in OT	Safety Goal 2.0	appointment card /
	book.	(MPSG)	record
			Record book /
			census
Assess / Verify	Verify correct	Manual Arahan	Safe Surgery Safe
Patient / Correct Site	patient.	Kerja	Life (SSSL) Form
/ Allergy Status	• Verify correct site.		<ul> <li>Operation theatre</li> </ul>
	<ul> <li>Verify correct</li> </ul>	Safe Surgery Safe	(OT) list
	procedure.	Life (SSSL)	
	• Verify allergy		
	status.	Malaysian Patient	
	Ensure written	Safety Goal 2.0	<ul> <li>Signed consent</li> </ul>
	consent has been		form.
	taken.		
Prepare Instruments	• Ensure microscope		Microscope
/ Equipment /	functioning well.		Dressing Set
Medication	• Prepare complete		Ptervojum Set
	& sterile		*Refer Annendix 3
	Ptervgium set.		Refer Appendix e
	Prenare		Supplementary
	supplementary		instruments
	instruments.		i Diathermy
			ii 8.0 viervl suture
			iii Glue if applicable
	Prenare solutions		Solutions
	· Trepure bonations.		i Antisentic –
			novidone iodine
			5%
	• Prenare disposable		• Disposable item
	item.		i Eve drape
			ii Syringe
			iii Needle
			iv Sterile glove
			v. Eve pad
	Verify correct		Medication
	medication		i Tonical
	Verify medication		Anaesthesia
	expiry date		7 maconcola
	expiry date.		

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			:: Timessing
			11. Lignocaine
			injection 2%
			iii. Ointment
D D I			• Graft if necessary
Prepare Patient	• Verify correct	Malaysian Patient	• Patient record
	patient.	Safety Goal 2.0	
	• Inform the patient		• Antiseptic
	about the	Manual Aranan	
	procedure.	Kerja	
	• Position patient in		
	supine on the table		
	Instil topical		<ul> <li>Topical</li> </ul>
	anaesthesia.		anaesthesia
	• Clean and drape		• Eye Drape
	patient's eye with		5 1
	aseptic technique		
Assist the Procedure	<ul> <li>Hand washing,</li> </ul>		• OT gown
	gowning, and		<ul> <li>Sterile glove</li> </ul>
	gloving using		
	aseptic technique		
	and proper sterile		
	attire.		
	<ul> <li>Assist doctor and</li> </ul>		
	wait for the next		
	instructions.		
	Steps (Perform by		Steps (Hand over by
	doctor)		AMO)
	1) Subconjunctiva		1) 2ml lignocaine in
	injection of LA		3ml syringe attach
	<b>2</b>		with 26g needle.
	2) Cut the neck of		2) Conjunctiva
	the pterygium and		scissor,
	dissect to separate		conjunctival
	it from the		torceps
	conjunctiva.		
	3) Scrape the		3) Tooke knife/blade
	ntervaium head		5) TOOKE KIIIIE/DIAGE
	from the corneal		
	site and evoice for		
	site and excise for		
	pterygia.		

	4) Measure and		4) Callipers and
	mark the size of		marker
	the conjunctiva for		
	grafting needs.		
	5) Subconjunctiva		5) Lignocaine in 3ml
	LA injection at		syringe attach with
	conjunctiva graft		26g needle.
	site		
	6) Excise		6) Conjunctiva
	conjunctiva graft		forcens and
	conjunctiva gratt		conjunctive soissor
	7) Suture		7) Needle holder and
	7) Suture		() Needle fiolder allu
	conjunctiva gran		viewal (absorbable
			vicryi (absorbable
			suture)
	8) Examine for		8) _
	extraocular		0)
	movement		
	movement.		
	9) Antibiotics		9) Ointment
			antibiotics
	10) Pad operated eye		10) Eye pad/
			micropore tape
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
	guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
Health Education	• Post-operative care		8
	i Do not rub the		
	operated eve		
	ii Open the eve pad		
	after 4 hours		
	and administer		
	the medication		
	Observe for		
	symptom of any		
	complications.		
	Advise patients to		
	go to the eve clinic		
	during office hours		
	and emergency		
	and emergency		

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	<ul> <li>department</li> <li>immediately after</li> <li>office hours if any</li> <li>complication</li> <li>occurs.</li> <li>Emphasize on</li> <li>follow up</li> <li>compliance.</li> </ul>		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT	
Receive Patient	• Register patient particulars in record book / OT book.	Malaysian Patient Safety Goal 2.0 (MPSG)	Patient     appointment card /     record     Record book /     census	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Verify correct implant.</li> <li>Verify implant expiry date.</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form.</li> </ul>	
Prepare Instruments / Equipment / Medication / Implant	<ul> <li>Ensure Phaco machine and surgical microscope functioning perfectly.</li> <li>Prepare complete &amp; sterile Cataract set.</li> </ul>		<ul> <li>Surgical microscope.</li> <li>Phaco machine.</li> <li>Dressing Set</li> <li>Cataract set.</li> <li>*Refer Appendix 4</li> <li>Irrigation aspiration probe (I/A)</li> </ul>	
	<ul> <li>Prepare supplementary instruments.</li> <li>Prepare solutions.</li> </ul>		<ul> <li>Supplementary instruments</li> <li>i. IOL injector</li> <li>Solutions</li> <li>i. Antiseptic solution</li> </ul>	
	• Prepare disposable item.		<ul> <li>solution</li> <li>ii. Balance salt solution (BSS)</li> <li>Disposable item</li> <li>i. Eye drape</li> <li>ii. Keratome</li> <li>iii. Ophthalmic</li> </ul>	

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	<ul> <li>Verify correct medication.</li> <li>Verify medication expiry date.</li> </ul>		viscosurgical device (OVD) • Medication i. Topical Anaesthesia ii. Carbachol 0.1mg/ml iii. Topical Steroid iv. Topical Artibuttor
	<ul> <li>Verify correct implant.</li> <li>Verify implant expiry date.</li> </ul>		<ul> <li>Intra ocular lens (IOL)</li> </ul>
	<ul> <li>Prepare intracameral antibiotics.</li> <li>1) Dilute cefuroxime powder 750mg with 7.5ml (750ml) normal saline or water for injection.</li> <li>2) Syringe out 1ml and dilute it with 9ml Normal Saline.</li> <li>3) Syringe out 1ml (dose 0.1ml/1mg)</li> <li>Prepare intracameral anaesthesia.</li> <li>1) Withdraw 0.1ml lignocaine 2% in 1cc syringe (if indicated)</li> </ul>		
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Confirm adequate dilation.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in supine on the table</li> <li>Instil topical anaesthesia</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	<ul> <li>Patient record</li> <li>Topical anaesthesia</li> <li>Dilating eye drop</li> <li>Eye Drape</li> </ul>

	• Clean and drape patient's eye with aseptic technique	
Assist the Procedure	<ul> <li>Hand washing, gowning, and gloving using aseptic technique and proper sterile attire.</li> <li>Assist doctor and wait for the next instructions.</li> </ul>	<ul><li>OT gown</li><li>Sterile glove</li></ul>
	<ul> <li><u>Steps (Perform by</u> <u>doctor)</u></li> <li>1) Corneal incision.</li> <li>2) Staining of anterior capsule.</li> <li>3) Flushing trypan blue</li> </ul>	<ul> <li><u>Steps (Hand over by</u> <u>AMO)</u></li> <li>1) Keratome blade</li> <li>2) Trypan blue</li> <li>3) BSS in 3ml syringe attached with Rycroft cannula.</li> </ul>
	<ol> <li>4) Viscoelastic injection into anterior chamber</li> </ol>	4) Viscoelastic
	<ul> <li>5) For small pupil, intracameral adrenaline and / or iris retractor</li> <li>6) Continuous curvilinear capsulotomy (CCC)</li> </ul>	<ul> <li>5) Diluted adrenaline / iris retractor &amp; 15- degree blade.</li> <li>6) Utrata forceps</li> </ul>
	7) Hydro manoeuvres	7) BSS in 3ml syringe attached with Rycroft cannula
	<ol> <li>8) Nucleus disassembly</li> <li>9) Cortical clean up</li> </ol>	<ul> <li>8) Phaco probe handpiece</li> <li>9) Irrigation aspiration probe (I/A)</li> </ul>
	10) Filling of capsular bag with viscoelastic	10) Viscoelastic
	11) Implantation IOL	11) Intraocular lens
	12) Positioning of IOL	12) IOL manipulator

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	<ul> <li>13) Removal of viscoelastic</li> <li>14) Closure of the incision. Wound hydration.</li> <li>15) Injection intracameral antibiotics.</li> <li>16) Cover the eye</li> </ul>		<ul> <li>13) Irrigation aspiration probe (I/A)</li> <li>14) BSS in 3ml syringe attached with Rycroft cannula.</li> <li>15) Diluted cefuroxime.</li> <li>16) Eye shield/pad/ micropore tape</li> </ul>
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
	guideline.	2018 ( $3^{rd}$ edition)	guideline.
	<ul> <li>i Doscoperative care</li> <li>i. Do not rub your eye.</li> <li>ii. Do not lift heavy weights.</li> <li>iii. Do not bend over.</li> <li>Observe for symptom of any complications.</li> <li>Advise patients to go to the eye clinic during office hours and emergency department immediately after office hours if any complication occurs.</li> <li>Emphasize on follow up compliance.</li> </ul>		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	<ul><li> Procedure book / census.</li><li> SSSL Form</li></ul>

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# OPTHALMOLOGY



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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	Register patient particulars in record book / OT book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book /</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>	
Prepare Instruments / Equipment / Medication / Implant	<ul> <li>Check functionality Machine</li> <li>Prepare complete and sterile ECCE set.</li> </ul>	Manual Arahan Kerja	<ul> <li>Operating Microscope</li> <li>Diathermy machine</li> <li>ECCE Set</li> <li>*Refer Appendix 5</li> </ul>	
	<ul> <li>Prepare supplementary instruments.</li> <li>Prepare disposable items.</li> </ul>		<ul> <li>Supplementary instruments <ol> <li>Eye drape</li> <li>Keratome knife</li> <li>Neratome</li> <li>Injector Intra Ocular Lens (IOL).</li> </ol> </li> <li>Disposable items <ol> <li>Intravenous drip set</li> <li>Syringes – 3ml x</li> <li>5ml x 1, 1ml x1 and needle</li> <li>(23Gx1, 26Gx1)</li> <li>10/0 Nylon suture</li> <li>Drape - adhesive disposable half</li> </ol> </li> </ul>	
	• Prepare solutions.		body preferred v. Eye pad vi. Eve Shield	

	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>vii. Adhesive tape</li> <li>Solution <ul> <li>Antiseptic lotion</li> <li>Normal saline</li> </ul> </li> <li>Balanced Salt <ul> <li>Solution (BSS)</li> </ul> </li> <li>iv. Trypan blue <ul> <li>(optional)</li> <li>v. Ophthalmic</li> <li>Viscosurgical</li> <li>Device (OVD)</li> </ul> </li> <li>Medication <ul> <li>Topical</li> <li>Anaesthesia</li> <li>Lignocaine HCL 2%</li> </ul> </li> <li>Bupivacaine <ul> <li>HCL 0.5%</li> <li>v. Dilating drops.</li> <li>v. Topical</li> </ul> </li> </ul>
	<ul><li>Verify correct implant.</li><li>Check implant expiry date.</li></ul>		Antibiotics vii. Intracameral carbachol • Implant i. Intra Ocular Lens
	Medication Preparation Step • Withdraw both Lignocaine HCL 2% Bupivacaine HCL with ratio 1:1 • Prepare Balance Salt Solution (BSS) with Adrenaline 1:1,000 dilutions (0.5ml Adrenaline 0.36 % / 500ml BSS) • Antibiotic injection Withdraw both Gentamicin 20mg Dexamethasone 2mg with ratio 1:1		(IOL)
Prepare Patient	• Verify correct patient.	Malaysian Patient Safety Goal 2.0	<ul><li>Patient record</li><li>Dilating eye drop</li></ul>

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	<ul> <li>Confirm adequate dilatation.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in supine on the table</li> <li>Clean and drape patient's eye with clean / aseptic technique</li> </ul>	Manual Arahan Kerja	<ul><li>Antiseptic</li><li>Eye Drape</li></ul>
Assist the Procedure	<ul> <li>Hand washing, gowning and gloving using aseptic technique and proper sterile attire.</li> <li>Assist doctor and wait for the next instructions</li> </ul>		<ul><li>OT gown</li><li>Sterile glove</li></ul>
	Steps (Perform by doctor)1) Clean the patient's eye.2) Drape the patient3) Apply eye speculum.4) Localised Conjunctival incision.5) Sub-tenon injection.6) Conjunctival Peritomy.7) Secure Bleeding8) Limbal / corneal incision.9) Injection of OVD.10) Bend Needle for Capsulotomy.11) Capsulotomy.12) Hydrodissection		Steps (Hand over by AMO)1) Antiseptic solution2) Eye Drape 3) Eye Speculum4) Injection Lignocaine 2%5) Injection Marcaine 0.5%6) Diathermy Forceps7) Cotton Bud 8) 15 Degree knife9) OVD 10) Syringes 1ml with needle 26G 11) Utrata Capsulorhexis Forceps 12) BSS in 3ml
	13) Express nucleus of the lens		13) Vectis and Squint Hook

	14) Preplaced corneal/limbal		14) Suture Tying forceps and 10/0
	suture		Nylon Suture
	15) Irrigation and		15) Simcoe Cannula
	aspiration of		15) Shinese Califiana
	cortex		
	16) Injection of OVD		16) OVD
	17) Insertion of IOI		10) OVD 17) IOI
	18) Irrigation and		17) IOL 18) Simcoe
	aspiration of		irrigating_
	OVD		aspirating cannula
	10) Cornea/limbal		10) Suture Tying
	wound suture		forcens and 10/0
	would suture		Nylon Suture
	20) Reform of		20) BSS in $3ml$
	anterior chamber		svringe
	21) Intracameral		21) Intracameral
	carbachol		carbachol
	intraocular		curouchor
	solution		
	22) Subconjunctival		22) Antibiotic
	antibiotic		22) 1
	injection		
	23) Instilled steroid		23) Evedrops
	drops and		
	antibiotic drops		
	into the operated		
	eve at the end of		
	surgerv		
	24) Apply eve pad		24) Eve pad and Eve
	and eve shield on		shield
	the operated eve		
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
mstruments	guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
Health Education	• Advised patient to	Manual Arahan	
	go to eye clinic	Kerja	
	during office hours	-	
	or emergency		
	department		
	immediately after		
	office hour if any		
	complication		
	occurs.		

	• Compliance to medication and follow up appointment.		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patients record book.	Malaysian Patient Safety Goal 2.0 (MPSG)	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> <li>BHT patient</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Ensure written consent has been taken.</li> <li>Verify correct IOL implant.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form.</li> <li>Intra ocular lens</li> </ul>
Prepare Instruments / Equipment / Medication / Implant	<ul> <li>Ensure microscope works perfectly.</li> <li>Prepare vitrectomy machine.</li> <li>Prepare cryo machine.</li> <li>Prepare complete &amp; sterile Intra capsular cataract extraction (ICCE) set.</li> </ul>		<ul> <li>Surgical Microscope.</li> <li>Anterior vitrectomy machine.</li> <li>Cryo machine</li> <li>Dressing Set</li> <li>Intra capsular cataract extraction (ICCE) Set.</li> <li>*Refer Appendix 6</li> </ul>
	<ul> <li>Prepare supplementary instruments.</li> <li>Prepare solutions.</li> <li>Prepare disposable</li> </ul>		<ul> <li>Supplementary instruments</li> <li>Diathermy</li> <li>Simcoe canula</li> <li>Anterior vitrectomy probe</li> <li>Cryo probe</li> <li>Solutions</li> <li>Antiseptic solution</li> <li>Disposable item</li> </ul>
	item.		1. Eye drape ii. Eye sponge

Prepare Patient	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li><u>Medication</u> <u>Preparation Step</u></li> <li>Dexamethasone 0.5ml</li> <li>Gentamycin 0.5ml</li> <li>In 3ml syringe</li> <li>Check implant expiry date.</li> <li>Verify correct patient.</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>iii. Viscoelastic agent</li> <li>iv. 10.0 Nylon</li> <li>v. 15-degree blade/ keratome</li> <li>vi. Eye pad</li> <li>Medication</li> <li>i. Sub-tenon</li> <li>injection of local</li> <li>anaesthesia</li> <li>ii. Topical</li> <li>anaesthesia</li> <li>iii. Topical Steroid</li> <li>iv. Topical</li> <li>Antibiotics</li> <li>v. Miostat</li> <li>vi. Triamcinolone</li> <li>injection</li> <li>Implant</li> <li>i. Intraocular lens</li> <li>Patient record</li> <li>Topical</li> </ul>
	<ul> <li>Confirm adequate dilation.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in supine on the table</li> <li>Clean and drape patient's eye with aseptic technique</li> </ul>	Manual Arahan Kerja	anaesthesia • Dilating eye drop • Antiseptic • Eye Drape
Assist the Procedure	<ul> <li>Hand washing, gowning, and gloving using aseptic technique and proper sterile attire.</li> <li>Assist doctor and wait for the next instructions.</li> </ul>		<ul><li>OT gown</li><li>Sterile glove</li></ul>
	<u>Surgery Steps</u> ( <u>Performed by</u> <u>doctor</u> ) 1) Sub-tenon injection of LA		Steps (Hand over by AMO) 1) Conjunctival forceps/ conjunctiva scissors / sub-

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19) Closure of		holder and suture
wound. Reposition		tire
coniunctiva.		20) Steroid injection
<b>j</b>		_ • ) - · · · · · · · · · · · · · · · · · ·
20) Subconjunctiva		21) Eve shield / pad.
antibiotic injection		micropore tape
21) Cover the eye		1 1
Refer to Cleaning	Policies and	Refer to Cleaning
and sterilization of	Procedure on	and sterilization of
microsurgery	Infection Prevention	microsurgery
instruments	and control, MOH,	instruments
guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
• Post-operative care		0
i. Do not rub vour		
eves.		
ii. Do not lift heavy		
weights.		
iii. Do not bend over.		
iv. Compliance to		
eye drops		
<ul> <li>Advice to observe</li> </ul>		
for any symptoms		
of complications.		
Advise patients to		
go to eve clinic		
during office hour		
and emergency		
denartment		
immediately after		
office hour if any		
onnee nour in any		
complication		
occurs.		
Conditional		
prayers (Solat		
<i>bersyara</i> t)		
<ul> <li>Emphasize on</li> </ul>		
follow up		
compliance.		
Record procedure	Safe Surgery Safe	Procedure book /
1	Life (SSSL)	census.
		SSSL Form
	<ul> <li>19) Closure of wound. Reposition conjunctiva.</li> <li>20) Subconjunctiva antibiotic injection</li> <li>21) Cover the eye Refer to Cleaning and sterilization of microsurgery instruments guideline.</li> <li>Post-operative care</li> <li>Do not rub your eyes.</li> <li>Do not lift heavy weights.</li> <li>Do not bend over.</li> <li>iv. Compliance to eye drops</li> <li>Advice to observe for any symptoms of complications.</li> <li>Advise patients to go to eye clinic during office hour and emergency department immediately after office hour if any complication occurs.</li> <li>Conditional prayers (Solat bersyarat)</li> <li>Emphasize on follow up compliance.</li> <li>Record procedure</li> </ul>	19) Closure of wound. Reposition conjunctiva.20) Subconjunctiva antibiotic injection 21) Cover the eyeRefer to Cleaning and sterilization of microsurgery instruments guideline.Policies and Procedure on Infection Prevention and control, MOH, 2018 (3rd edition)• Post-operative care i. Do not rub your eyes.2018 (3rd edition)• Post-operative care i. Do not rub your eyes.2018 (3rd edition)• Post-operative care i. Do not lift heavy weights.2018 (3rd edition)• Advice to observe for any symptoms of complications.Advice to observe for any symptoms of complications.• Advise patients to go to eye clinic during office hour and emergency department immediately after office hour if any complication occurs.Conditional prayers (Solat bersyarat)• Emphasize on follow up compliance.Safe Surgery Safe Life (SSSL)

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment / Medication	<ul> <li>Make sure bipolar cautery machine works perfectly.</li> <li>Prepare complete &amp; sterile Lid set.</li> <li>Prepare supplementary instruments</li> <li>Prepare solutions</li> <li>Prepare disposable items</li> <li>Verify correct medication.</li> <li>Check medication</li> </ul>		<ul> <li>Bipolar cautery machine</li> <li>Lid Set</li> <li>*Refer appendix 7</li> <li>Supplementary instruments <ul> <li>Sterile ruler</li> <li>Sterile ruler</li> <li>Sterile marker</li> <li>Cautery cable</li> <li>Cautery forcep</li> </ul> </li> <li>Solutions <ul> <li>Antiseptic</li> <li>Sterile water</li> <li>Formaldehyde</li> </ul> </li> <li>Disposable items <ul> <li>Eye drape</li> <li>Gauze</li> <li>Cotton bud</li> <li>Dressing set</li> <li>V.6-0 non- absorbable</li> <li>suture</li> <li>vi.6-0 ¼ or 6-0 ¾</li> <li>absorbable</li> <li>suture</li> </ul> </li> <li>Medications <ul> <li>Bupivacaine &amp; Adrenaline</li> </ul> </li> </ul>

	MedicationPreparation Step1. Local anaesthesiaMarcaine:Adrenaline 1 in200,000• Verify correctimplant.• Check implantexpiry date.		<ul> <li>ii. Ointment chloramphenicol</li> <li>Implants (frontalis suspension surgery)</li> </ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Positioning patient in supine position</li> <li>Clean and drape patient's eye with aseptic technique</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i>	
Assist the Procedure	<ul> <li>Hand washing, gowning and gloving using aseptic technique and proper sterile attire.</li> <li>Assist doctor and wait for the next instructions</li> </ul>		<ul><li>OT gown</li><li>Sterile glove</li></ul>
	<u>Steps (Perform by</u> <u>doctor)</u> 1) Skin marking with marker 2) Local anaesthetic administering 3) Skin incision		<ul> <li><u>Steps (Hand over by</u> <u>AMO)</u></li> <li>1) Skin marker</li> <li>2) Local anaesthesia</li> <li>3) Bard Parker handle with blade size 15</li> </ul>
	<ul> <li>4) Myocutaneous dissection</li> <li>5) Incision of orbital septum (e.g.; entropion, ptosis)</li> </ul>		<ul><li>4) Tooth forceps and Wescott</li><li>5) Tooth forceps and Wescott</li></ul>

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	6) Identification of		6) Observe
	lid structure (e:		
	g. inferior		
	retractor for		
	entropion		
	lovetor for		
	ptosis, lash root		
	for anterior		
	lamellar		
	repositioning) or		
	lid lesion (e.g.,		
	cyst or tumour)		
	7) In frontalis		7) Implant (frontalis
	suspension ptosis		suspension
	surgery, stab		surgerv)
	incisions are		85)
	made on the lid		
	and evebrow A		
	aliu cycolow. A		
	sing material		
	(Fascia Lata,		
	silicone rod or		
	suture material)		
	used to suspend		
	lid to the		
	frontalis muscle.		
	8) Suture the		8) 6.0 $\frac{1}{4}$ absorbable
	structures (e.g.		suture
	tightening of		Suture
	inferior		
	retractor		
	levator towards		
	the tarsal plate)		
	<ol><li>Skin closure</li></ol>		9) 6.0 or 7.0 non-
	suture		absorbable suture
			(size as surgeon
			preferences)
	10) Apply ointment		10) Ointment
	antibiotic		antibiotic
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microgurgory	mierogurgery	Infaction Drovention	miorogurgary
Interosurgery	incrosurgery	intection Prevention	incrosurgery
instruments	instruments	and control, MOH,	
TT 11 T1 1	guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
Health Education	<ul> <li>Post-operative care</li> </ul>		
	i. Cold compression		
	ii. STO 1 or 2 weeks		
	iii. Apply ointment		
	antibiotic		

	<ul> <li>Observe side effects / complications</li> <li>Advice patient to go to eye clinic during office hour and emergency department immediately after office hour if any complication occurs</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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WORK INSTRUCT	TION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book / Operation theatre (OT) book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	• Signed consent form
Prepare Instruments / Equipment/ Medication/ Implant	<ul> <li>Prepare complete syringing and probing set</li> <li>In centre privileged with nasoendoscopic services, additional nasal set preparation might be required</li> </ul>		<ul> <li>Syringing Set <ul> <li>Nettleship</li> <li>Punctum dilator</li> <li>Lacrimal</li> <li>cannula</li> </ul> </li> <li>Probing Set <ul> <li>Bowman's probe</li> <li>(various sizes)</li> <li>Tissue forceps</li> </ul> </li> </ul>
	<ul> <li>Prepare solutions.</li> <li>Verify correct implant.</li> <li>Check implant expiry date.</li> <li>Prepare disposable item.</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>Solutions <ol> <li>Antiseptic</li> <li>Normal saline</li> <li>9%</li> </ol> </li> <li>Implant <ol> <li>Lacrimal Stent</li> </ol> </li> <li>Disposable items <ol> <li>Syringe 3cc</li> <li>Cotton swab</li> <li>Fluorescein strip</li> <li>Ribbon gauze</li> </ol> </li> <li>Medication <ol> <li>Topical</li> <li>Anaesthesia</li> </ol> </li> </ul>

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Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Positioning patient</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	
	<ul><li>in supine position</li><li>Clean and drape patient's eye with aseptic technique</li></ul>		
Assist the Procedure	<ul> <li>Wash hand and gloving.</li> <li>Assist doctor and wait for the next instructions</li> </ul>		<ul><li>OT gown</li><li>Sterile glove</li></ul>
	Steps (Perform by doctor) 1) Administer nasal spray		Steps (Hand over by AMO) to doctor 1) Observe
	2) Make sure throat pack is inserted (to liaise with anaesthetist)		2) Reconfirm with anaesthetist
	<ol> <li>Follow the syringing clinical guideline (may varies in General Anaesthesia case) (Fluorescein- stained saline is used during syringing test)</li> </ol>		3) Nettleship punctum dilator, 3ml syringe, Lacrimal cannula, fluorescein- stained saline
	<u>PROBING</u> 4) Insert suitable		4) Bowman's
	size of bowman's probe into the canaliculi, lacrimal sac and nasolacrimal duct to open the valve		probe
	5) Insert lacrimal stent if the probing successful		5) Implant
	<ul><li>6) Apply antibiotic eye drop</li></ul>		6) Antibiotic eye drop

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Cleaning And Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guideline.	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guideline.
Health Education	<ul> <li>Post-operative care</li> <li>Observe side effects         <ul> <li>complications</li> </ul> </li> <li>Advice patient to go to eye clinic during office hour and emergency department immediately after office hour if any complication occurs.</li> <li>Emphasize on follow up compliance (stent removal after 3 months)</li> </ul>		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	• Procedure book / census. SSSL Form

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Γ	DONOR EYE PROCUREMENT AND PROCESSING				
INTRODUCTION	Donor eye procurement involves the retrieval of the donor eyeball under				
	strict aseptic precautions after contraindications have been excluded. This is				
	followed by processing the corneal button and scleral for preservation.				
	Eyes donated for transplantation must be retrieved before 12 hours of death.				
	Corneas stored in Optisol GS at <4 degrees Celsius can be kept for 14 days				
	before transplantation sclera can be stored long term in 70% alcohol.				
SCOPE	• The procedure will be assisted by privileged Assistant Medical Officer				
	(AMO).				
	• All organ donors indicated for eyeball procurement.				
SPECIFIC	• To procure the donated eyeball				
OBJECTIVE	• To process the corneal button and place in corneal storage media				
	• To process the scleral and place into 70% Alcohol				

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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Record details of deceased	<ul> <li>Verify correct identity.</li> <li>Verify correct deceased information.</li> </ul>		<ul> <li>Donor's identity and age</li> <li>Cause, time and circumstances of death</li> <li>Past and recent medical history</li> <li>Address of deceased if applicable</li> </ul>
Record details of informant	<ul> <li>Verify correct identity.</li> <li>Verify correct informant details.</li> </ul>		<ul> <li>Name</li> <li>Phone number</li> <li>Relationship with deceased</li> </ul>
Prepare equipment and materials to be used in the procurement process	<ul> <li>Prepare complete &amp; sterile Enucleation</li> <li>Prepare transport medium.</li> <li>Prepare supplementary instruments</li> <li>Prepare solutions.</li> <li>Prepare disposable item.</li> </ul>		<ul> <li>Enucleation set.</li> <li>Transport medium in cooler box.</li> </ul>
On site pre- procurement preparation - general			<ul> <li>Extend condolences and establish rapport with deceased's family</li> <li>Confirm identity of donor</li> <li>Assist doctor in taking consent</li> <li>Assist doctor in examination of deceased and taking blood samples if necessary</li> </ul>

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On site pre- procurement preparation - specific			<ul> <li>Prevent exposure keratopathy by providing sufficient lubrication of the eye and gentle taping of the eyelids</li> <li>Place a bag of crushed ice over the eyes – to keep the eye cool</li> <li>Elevate the head to prevent venous pooling</li> </ul>
Prepare procedure site	<ol> <li>Set up a clean work area with surgical instruments near the donor.</li> <li>Wear mask, wash hands and put on disposal surgical gown.</li> <li>Clean donor skin with Povidone iodine 10 % solution.</li> <li>Apply a sterile eye drape</li> </ol>	Perform procedure under aseptic precautions	
Assist doctor in performing Enucleation of donor eye		Refer to OT work instructions on assisting Enucleation surgery	<ul> <li>Enucleation Set: <ol> <li>Eye speculum</li> <li>Westcott curved tenotomy scissors</li> <li>Moorfields Conjunctival forceps</li> <li>St Martin's tooth forceps</li> <li>St Martin's tooth forceps</li> <li>St Mucleation scoop and scissors</li> <li>Muscle hook</li> <li>Needle holder</li> <li>Xiii. Artery forceps - 2</li> <li>Callinot</li> </ol></li></ul>

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		<ul> <li>Consumables</li> </ul>
		Items:
		<ul> <li>i. Sterile gloves</li> <li>ii. Disposable</li> <li>surgical gown and masks</li> <li>iii. Sterile drape</li> <li>iv. Syringe 10ml</li> <li>v. Needle 18G</li> <li>vi. Plain blood bottles - 3</li> <li>vii. Alcohol swabs</li> <li>viii. Sterile Eye container with label - 2</li> <li>ix. Gentamicin eye drop - 1</li> <li>x. Sterile Balanced Salt Solution - 500ml</li> <li>xi. Povidone Iodine 10% for skin</li> <li>xii. Cooler Box containing ice to transport tissue</li> <li>xiii. 4-0 Silk - 1</li> <li>xiv. 6-0 Vicryl - 1</li> <li>xv. Sterile Gauze xvii. Torch light xviii. Basic sterile</li> </ul>
Post enucleation treatment of donor eye	<ol> <li>Place the eye in the sterile eye container with the cornea facing upwards. Gauze can be used at the base of the container to prevent the globe from moving.</li> <li>Insert 2 moist cotton balls into</li> </ol>	

	<ul> <li>the bottom of the sterile container</li> <li>3) Place 3-4 drops of Gentamicin 0.3% on the cornea.</li> <li>4) Secure the lid of the container tightly and keep upright</li> <li>5) Place the procured cornea into the cooler box after labelling it with the donor's details: Name, I/C number, right or left eye, date and time of death, date and time of enucleation, and cause of death</li> </ul>	
Post Enucleation	<ol> <li>Remove speculum and repeat for other eye</li> <li>Gently insert moist cotton balls into both the sockets / suture conjunctiva</li> <li>Close both eyelids gently and inspect the cosmetic appearance of the donor</li> <li>Secure eyelids with 6-0 silk</li> <li>Check appearance of the eye again to ensure perfect cosmesis</li> <li>Remove all traces of Povidone Iodine from the skin</li> </ol>	
Corneoscleral Tissue Processing Post Procurement	Steps (Perform by doctors)	• Corneal Processing Set: i. Sterile trolley

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OPTHALMOLOGY

1) Assess the cornea	ii. Gallipot - 3
under the surgical	iii. Scalpel Blade
microscope or slit	No.11
lamp according to	iv. Bard Parker
the criteria in the	handle
criteria for	v. Westcott scissors
assessment of	vi. Fine tooth forceps
donor tissue.	vii. Evisceration
2) Fill up the donor	Scoop
tissue assessment	
form (Appendix)	
3) Wrap gauze	<ul> <li>Consumables</li> </ul>
around the eve at	Items:
the equator of the	i. Sterile gloves
globe leaving the	ii. Disposable
cornea exposed	surgical gown and
and ensure secure	masks
hold of the eveball.	iii Povidone iodine
4) Remove excess	5%
conjunctiva from	iv Labelled sterile
the limbus.	eve container with
5) Make an incision	70% alcohol – 2
4 mm from the	v Labelled Ontisol
limbus into the	GC (cornea
choroidal space.	preservative media)
6) Using a Westcott	- 2
scissors, make a	vi. Donor
360 degree	Information form -
incision around the	2
limbus.	vii. Sterile Balanced
7) Use a fine tooth	Salt Solution 0.5L
forceps to lift the	viii. Gauze
edge of the cornea	ix. Alcohol 70%
and carefully peel	x. Cooler Box
the cornea off the	containing ice to
iris until it is free	transport tissue
(DO NOT	xi. Donor
BUCKLE THE	information form -
CORNEA)	2
8) Prepare the sclera	
9) Excise the	
remnants of the	
Tenon's capsule,	
extraocular	
muscles and optic	
nerve	
10) Remove all	
intraocular	
contents with the	
evisceration scoop	

D)

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	) Rinse the sclera n Balanced salt solution ) Store sclera in a container with 700/	
13	70%. ) Label the scleral	
	container.	

# REFERENCE

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WORK INSTRUCT	WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT		
Receive Patient	• Register patient particulars in OT book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / Record</li> <li>Record book/census</li> </ul>		
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) form</li> <li>OT list</li> <li>Consent form</li> </ul>		
Prepare Instruments / Equipment	<ul> <li>Make sure microscope works perfectly.</li> <li>Prepare supplementary instruments</li> </ul>		<ul> <li>Microscope.</li> <li>Supplementary instruments         <ol> <li>Eye speculum</li> <li>Straight scissors</li> <li>Calipers</li> <li>Kimura spatula</li> <li>Conjunctival Forceps</li> <li>Suture tying forcep -2</li> <li>Trephines for AMT on cornea</li> <li>Needle holder</li> <li>Vannas scissors</li> <li>Wescott scissors</li> </ol> </li> </ul>		
	<ul> <li>Prepare solutions.</li> <li>Prepare disposable item</li> </ul>		<ul> <li>Solutions <ol> <li>Antiseptic lotion</li> <li>Balance Salt</li> <li>Solution.</li> </ol> </li> <li>Disposable item <ol> <li>Drassing set</li> </ol> </li> </ul>		
	item.		<ol> <li>Dressing set</li> <li>Surgical eye</li> <li>Drape/cataract</li> <li>towel</li> <li>Cotton buds</li> </ol>		

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1	1	1	
			iv. 5cc Syringe with Rycroff cannula
			v. Suture 8.0 Vicryi (Conjunctiva) or Nylon 10/0
			(Cornea) vi. crescent blade (if
			required) vii. Surgical marker
			viii. Bandage contact
			lens (BCL)
	<ul> <li>Verify correct medication.</li> </ul>		<ul> <li>Medication</li> <li>i. Topical</li> </ul>
	<ul> <li>Check medication expiry date.</li> </ul>		anaesthesia ii. Topical
			Antibiotics drop/ointment
Prepare Patient	Verify correct     patient.	Manual Arahan Keria	
	• Explain the purpose of and the procedure to	,-	
	patient and / or relatives		
	• Position the patient comfortably in supine position		
	Ensure good lighting		
Assist the Procedure	• Hand washing, gowning and gloving using aseptic technique		<ul><li>OT gown</li><li>Sterile glove</li><li>Surgical face mask</li></ul>
	<ul><li>and proper sterile attire.</li><li>Assist doctor and</li></ul>		
	wait for the next instructions		
	Steps (Perform by doctor) 1) Area cleaned and		Steps (Handover by AMO) 1) Dressing set with
	draped		antiseptic solution and

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	2) Topical or local		drape/cataract towel 2) Gutt Propacaine	
	anesthesia		(Alcaine 0.5%) or lignocaine 2%	
	5) Loose corneal epithelium and any superficial necrotic tissue are completely debrided.		5) Kimura spatula or crescent blade	
	4) The area to be covered is measured.		4) Callipers and surgical marker	
	5) The amniotic membranes cut according to the size required either with trephine or free hand		5) AMT with Trephine or straight scissor	
	6) The amnoitic membrane is placed with the epithelial surface facing up and the stromal side (sticky surface) facing down		6) Needle holder, 2 Suture tying forceps, suture 8.0 Vicryl for conjunctiva and 10.0 Nylon for cornea and Wescott/vannas scissor	
	7) At the end of surgery, a bandage soft contact lens is inserted for AMT placed on the cornea.		7) Bandage Contact Lens (BCL)	
	8) The eye is then paded for 24 to 48 hours with ointment antibiotics.		8) Eye pad & eye shield	
	9) Post-operatively, topical antibiotic will be applied.		9)Topical antibiotic drops/ointment	
Cleaning and Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guideline.	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guideline.	

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Health Education	<ul> <li>Wash hands well when apply the medication</li> <li>Observe BCL in site</li> <li>Monitor for an eye infection</li> <li>Avoid rubbing eyes.</li> </ul>		
Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> <li>Patient record</li> </ul>

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT
Receive Patient	<ul> <li>Verify correct patient.</li> <li>Register the patient particulars in Patient's Record Book</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Referral letter</li> <li>OT list</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Explain to the patient the indication of the procedure.</li> <li>Ensure written consent has been taken</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient record.</li> <li>Signed consent form</li> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>OT list</li> <li>Medication chart</li> </ul>
Prepare Instruments / Equipment / Medication	<ul> <li>Make sure microscope machine works perfectly.</li> <li>Prepare complete &amp; sterile eye cleansing set.</li> <li>Prepare supplementary instruments</li> </ul>		<ul> <li>Microscope machine.</li> <li>Dressing Set</li> <li>DSAEK Set.</li> <li>*Refer Appendix 8</li> <li>Supplementary instrument <ul> <li>90° Spatula</li> <li>Calipers</li> <li>Trephine</li> <li>Barraquer needle holder</li> <li>Suture tying – 2</li> <li>Vannas scissor</li> <li>Vii. Bonn-Moria forceps</li> <li>Viii. Reverse Terry- sinskey</li> <li>ix. Irrigation Port</li> <li>x. Sinskey Hook</li> <li>xi. Eye Speculum</li> <li>xii Corneal Marker</li> </ul> </li> </ul>

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			xiii. O'gawa Forceps xiv. Gorovoy Descemetorhexis Forceps
	• Prepare solutions.		<ul> <li>Solutions</li> <li>i. Antiseptic solution</li> <li>ii. Balance salt solution (BSS)</li> </ul>
	• Prepare disposable item.		<ul> <li>Disposable item <ol> <li>15° Blade</li> <li>2.75mm Blade</li> <li>MVR blade (if req)</li> <li>Sterile marker</li> <li>Fluorescein</li> <li>Strip</li> <li>Vi. Vicryl 8-0 suture</li> <li>for conjunctival</li> <li>and nylon 10.0</li> <li>suture for</li> <li>cornea</li> <li>vii. Sterile gauze</li> <li>viii. Sponge spears</li> <li>ix. Sterile cotton</li> <li>bud</li> <li>x. Bandage contact</li> <li>Lens (BCL)</li> </ol> </li> </ul>
	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>		<ul> <li>Medication         <ol> <li>Topical                  anaesthesia                  ii. Topical Steroid                  iii. Topical                  Antibiotics</li> </ol></li></ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Explain to the patient the Surgical Operation to be carried out</li> <li>Position the patient in supine position.</li> <li>Place a linen protector under the intended area</li> </ul>	Manual Arahan Kerja	

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Assist the Procedure	<ul> <li>Clean and drape patient's eye with clean / aseptic technique</li> <li>Hand washing, gowning and gloving using aseptic technique and proper sterile</li> </ul>	<ul><li>OT gown</li><li>Sterile glove</li><li>Surgical face mask</li></ul>
	attire. • Assist doctor and wait for the next instructions	
	Steps (Perform by doctor) 1) Prepare the graft by pre-cutting the donor using microkeratome	<u>Steps (Handover by</u> <u>AMO)</u> 1) Microkeratome
	<ol> <li>Mark the incision sites on the cornea.</li> <li>Create a paracentesis and insert anterior chamber</li> </ol>	<ul><li>2) surgical marker pen</li><li>3) 15-degree blade and AC maintainer with BSS</li></ul>
	<ul> <li>Mark the corneal surface to outline area of Descemet membrane to be removed.</li> </ul>	4) Observe
	5) Use a reverse Sinskey hook to score Descemet membrane	5) Reverse sinskey hook
	6) Remove the detached Descemet membrane using forceps.	6) Gorovoy Descemetorhexis Forceps
	<ul> <li>7) Trephine the donor tissue</li> <li>8) Put the donor tissue onto a Busin glide spatula</li> <li>9) Insert the donor tissue into the</li> </ul>	<ul> <li>7) Trephine and donor cornea tissue</li> <li>8) Busin Glide</li> <li>spatula and Moria forcep</li> <li>9) Observe</li> </ul>
	anterior chamber	9) Observe

	10) Unfold and float		10) 5cc syringe with
	the donor graft		BSS
	using BSS		
	<ol><li>Remove the</li></ol>		11) Observe
	Anterior chamber		
	maintainer		
	12) Suture the		12) Barraquer needle
	corneal incision		holder, 2 suture
	with 10-0 nylon		tying forcep, vannas
	suture.		scissor
	<ol><li>Position the</li></ol>		13) Reverse terry
	graft centrally		sinskey
	14) Fill the anterior		14) 3cc syringe with
	chamber with air to		Rycroft and fill up
	pressurize the eye.		with air
	15) Perform venting incisions.		15) MVR blade
	16) Wait 10 minutes		16) Observe
	to allow adherence.		10) 0000110
	17) Dilate the pupil		17) Observe
	fully.		
	18) Partially release		18) 3cc syringe with
	the full air fill.		Rycroft
	19) Subconjunctival		19) 3cc syringe with
	antibiotic and		gentamycin 20mg
	steroid injection		and dexamethasone
	given before		2mg for
	padding the eye		subconjunctival
	with antibiotic		injection
	ointment.		20) eye pad/shield
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
	guideline.	2018 (3 <sup>rd</sup> edition)	guideline.
Health Education	<ul> <li>Post-operative care</li> </ul>		
	i. Wash hands well		
	when apply the		
	medication		
	ii. Post operatively a		
	BCL will be		
	placed		
	iii. Monitor for an		
	eye infection		
	iv. Avoid rubbing		
	eyes frequently		
	<ul> <li>Strict positioning</li> </ul>		
	without pillow for		
	the first day		

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Documentation • Record procedure	Safe Surgery Safe Life (SSSL)	<ul><li> Procedure book / census.</li><li> SSSL Form</li></ul>
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WORK INSTRUCT	WORK INSTRUCTION			
ΑCTIVITY	WORK PROCESS	STANDARD	REOUIREMENT	
Receive Patient	• Register patient particulars in the patient's record book	Malaysian Patient Safety Goal 2.0	Patient appointment card/record     Record book/census	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify the correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Written consent form</li> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>OT list</li> </ul>	
Prepare Instruments / Equipment / Medication / Implant	<ul> <li>Prepare microscope and Bipolar cautery machine</li> <li>Prepare a complete and sterile Penetrating Keratoplasty set.</li> <li>Prepare supplementary instruments</li> </ul>		<ul> <li>Microscope machine.</li> <li>Bipolar cautery machine</li> <li>Penetrating Keratoplasty Set.</li> <li>*Refer Appendix 9</li> <li>Supplementary instruments <ol> <li>Eye speculum</li> <li>Calipers</li> <li>Cornea scissor right/left</li> <li>Corneal.12mm forcep or colibri forceps</li> <li>Suture-tying forcep-2</li> <li>Vannas scissor</li> <li>Vii. Wescott scissor</li> <li>Tooth forcep</li> </ol> </li> </ul>	
			1x. Conjunctival forcep x. Trephines xi. Simcoe IA set xii. Dressing set xiii. Bipolar cautery	

	xiv. Microscope handle
• Prepare solutions.	<ul> <li>Solutions</li> <li>Antiseptic solution</li> <li>Balanced salt solutions (BSS)</li> </ul>
• Prepare disposable items.	<ul> <li>Disposable item <ul> <li>Ophthalmic</li> <li>drape</li> <li>Keratometer</li> <li>(intraoperative)</li> <li>5cc Syringe -1</li> <li>Rycroft</li> <li>Scc syringe -2</li> <li>Hypodermic</li> <li>Needle 21/26G</li> <li>10-0 Nylon</li> <li>suture</li> <li>4-0 Silk suture</li> <li>(if required)</li> <li>15-degree angle</li> <li>blade</li> <li>X. Viscoelastic</li> <li>Device</li> <li>Xi. Fluorescein</li> <li>Strip</li> <li>Xii. Sponge spears</li> <li>Xiii. Sterile cotton</li> <li>bud</li> <li>Xiv. Sterile marker</li> <li>yen</li> <li>xv. Eye pad/shield.</li> </ul></li></ul>
<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> </ul>	<ul> <li>Medication         <ol> <li>Topical anaesthesia</li> <li>Sub conjunctival Gentamicin 20mg</li> <li>Sub conjunctival Dexamethasone 2mg</li> <li>Topical/ointment Antibiotics</li> <li>Corneal tissue stored in corneal storage media solution.</li> </ol> </li> </ul>

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Prepare Patient	<ul> <li>Verify correct</li> </ul>	Malaysian Patient	<ul> <li>Patient record</li> </ul>
	patient.	Safety Goal 2.0	<ul> <li>Dilating eye drop</li> </ul>
	• Inform the patient		• Antiseptic
	about the	Manual Arahan	• Eve Drane
	procedure	Keria	• Lyc Diape
	procedure.	110.90	
	• Position the patient		
	in supine position		
	on the OT table.		
	• Clean and drape the		
	patient's eye with		
	aseptic tecnique		
Assist the Procedure	• Hand washing		1) OT gown
Assist the Procedure	• Hand washing,		2) Starila glava
	gowning, and		2) Sterne glove
	gloving using an		
	aseptic technique		
	and proper sterile		
	attire.		
	• Assist the doctor		
	and wait for the		
	next instructions		
	next mstructions		
	Stong (Doutours by		Steps (Hand over by
	Steps (Perform by		AMO)
	doctor)		<u>AMOJ</u>
			1) [ 1
	1) Apply eye		I) Eye speculum
	speculum.		
	2) Placement of		2) Squint hook,
	bridle sutures.		tooth forceps, 4-0
			silk mounted on a
			needle holder
			straight scissors
			artory forcong
			artery forceps.
			2) Colinon starila
	3) Determination of		5) Camper, sterne
	the graft size.		marker pen, trephine
			0.0 11
	4) Prepare the donor		4) Corneal button in
	button as required.		cornea storage
	_		media solution,
			tooth forceps,
			corneal trephine
			(size as requested by
			surgeon), corneal
			0.12mm forcens
			sponge spears
			sponge spears
	5) D1 (1 1		5) Company stores
	5) Place the donor		madia aslutian in 2
	button on the		media solution in 3cc
	Teflon block with		syringe and gallipot.

some cornea storage media solution 6) Pre-trephination preparation of the recipient 7) Trephination of the recipient cornea 8) Suturing of donor corneal tissue onto the recipient bed. 9) Removal of viscoelastic device and suturing of paracentesis. 10) Reformation of anterior chamber. inspection of wound integrity and astigmatism 11) Subconjunctival injection

6) 15-degree angle blade and viscoelastic device.

7) Corneal trephinesize as requested by surgeon, sterile marker pen, corneal forceps 0.12mm, 15degree angle blade or diamond knife, viscoelastic device, corneal scissors right and left.

8) Corneal forceps 0.12mm, pollock forceps, colibri forceps, 10-0 nylon suture mounted on a needle holder, 2 suture tying forceps, vannas scissors, sponge spears, BSS in a Bishop Harmon set

9) Simcoe IA with BSS, corneal forceps 0.12, 10-0 nylon suture mounted on a needle holder, suture tying forceps, vannas scissors.

10) Fluorescein strips, sponge spears, BSS on a 5cc syringe, keratometer (intraoperative)

11) Pre-prepared antibiotic with steroid in 3cc syringe and 26G needle.

	12) Clean and apply eye shield with or without eye pad.		12) Wet and dry gauze, eye shield, eye pad, antibiotic with steroid eye drop / ointment.
	13) (Alternative Process/Variation) Conjunctival periotomy (After placement of bridle suture)		13) Conjunctival forceps, conjunctiva scissors, bipolar cautery
	14) (Alternative Process/Variation) Placement of sclera fixation ring (After the placement of bridle suture or periotomy)		14) Corneal forceps, double armed 8-0 Vicryl mounted on a needle holder, scleral fixation ring, suture tying forceps, conjunctival scissors.
Cleaning And Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guideline.	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guideline.
Health Education	<ul> <li>Positioning in a supine position</li> <li>Observe side effect/complications</li> <li>Advice patient to go to Eye clinic during office hours or Emergency department immediately after office hours if any complication occurs</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>



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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Consent form</li> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> </ul>	
Prepare Instruments / Equipment / Medication / Implant	<ul> <li>Make sure suction machine works perfectly.</li> <li>Prepare complete &amp; sterile DCR set.</li> <li>Prepare supplementary instruments</li> </ul>		<ul> <li>Suction machine</li> <li>DCR Set         <ul> <li>Refer Appendix 10</li> <li>Supplementary             instruments             i. Sterile ruler             ii. Sterile marker             iii. Crescent knife             iv. Nasal speculum             v. Illuminated eye             loupe             vi. Cautery cable &amp;             forceps</li> </ul> </li> </ul>	
	<ul> <li>Prepare solutions.</li> <li>Prepare disposable items.</li> </ul>		<ul> <li>Solutions <ol> <li>Antiseptic</li> <li>Sterile water</li> </ol> </li> <li>Disposable items <ol> <li>Eye drape</li> <li>Gauze</li> <li>Cotton bud</li> <li>Ribbon gauze</li> <li>Dressing set</li> <li>6-0 non- absorbable suture</li> </ol> </li> <li>vii. 6-0 ½ absorbable suture</li> <li>viii. 4-0 non- absorbable suture (optional)</li> </ul>	

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	<ul> <li>Verify correct</li> </ul>		<ul> <li>Medications</li> </ul>
	medication.		i. Cocaine 5%
	<ul> <li>Check medication</li> </ul>		solution
	expiry date.		ii. Nasal
	Medication		decongestion
	Preparation Step		spray
	1) Local anaesthesia		iii. Bupiyacaine &
	i. Bupiyacaine &		Adrenaline
	Adrenaline		injection
	1  in  200,000		iv. Ointment
	2) Nasal nacking		chloramphenicol
	nreparation		
	i Bunivacaine &		
	Adrenaline 1 in		
	200,000,(1ml)		
	$\pm Cocoine 5\%$		
	+ Normal		
	+ Normal Solino (1ml)		
	2) Ovymatazalina		
	5) Oxymetazonne		
	nasal spray 2 pull		. 1 1 4
	(optional)		• Implant
			1. DCR tube or
	• Verify correct		stent
	implant.		
	<ul> <li>Check implant</li> </ul>		
	expiry date.		
Prepare Patient	<ul> <li>Verify correct</li> </ul>	Malaysian Patient	<ul> <li>Patient record</li> </ul>
	patient.	Safety Goal 2.0	Antiseptic
	<ul> <li>Inform the patient</li> </ul>		• Head drape turban +
	about the	Manual Arahan	Eye drape
	procedure.	Kerja	5 1
	• Positioning patient		
	in reverse		
	Trendelenburg		
	position on the bed		
	(to inform		
	anaesthetist)		
	• Clean and drane		
	- Crean and drape		
	asentic technique		
Assist the Drocodure	• Hand we -1-in -		• OT asum
Assist the Procedure	• Hand wasning,		• OI gown
	gowning and		• Sterile glove
	gioving using		
	aseptic technique		
	and proper sterile		
	attire.		
	<ul> <li>Assist doctor and</li> </ul>		
	wait for the next		
	wait for the next instructions		

PTHALMOLOGY

	Steps (Perform by		Steps (Hand over by
	doctor)		<u>AMO)</u>
	1) Cutaneous		1) Bard Parker blade
	incision		size 15
	2) Blunt dissection		2) Straight scissor
	3) Traction suture@		3) Suture silk $4-0@$
	skin retractor		Knapp retractor
	4) Periosteum		4) Freer Periosteal
	elevation		elevator
	5) Osteotomy		5) Kerrison rongeur
	6) Lacrimal stent		6) DCR stent
	insertion		
	7) Lacrimal sac		7) Crescent knife
	incision and flap		
	creation		
	8) Preplace suture		8) 6-0 <sup>1</sup> / <sub>2</sub> absorbable
	on posterior flap		suture
	9) Local infiltration		<ol><li>Local anaesthesia</li></ol>
	at nasal mucosal		
	(for haemostasis		
	purpose)		
	10) Nasal mucosal		10) Crescent knife
	incision + flap		
	creation		
	11) Suturing of		11) 6-0 absorbable
	posterior flap		suture
	12) Retrieval of		12) Curve artery (to
	stent in nasal		grab the stent)
	cavity		
	13) Suturing of		13) 6-0 $\frac{1}{2}$ absorbable
	anterior flap		suture
	14) Skin closure		14) 6-0 non-
	15) Skin dressing		absorbable suture
	and ointment		15) Bactigrass (if
	chloramphenicol		available) and
	application on		dressing gauze
	wound		
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning and
Sterilization of	and sterilization of	Procedure on	sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments guideline.
II 14 D1 -	guideline.	2018 (3 <sup>rd</sup> edition)	
Health Education	• Post-operative care		
	1		
	1) Always keep		
	incision site		
	clean		
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	<ol> <li>2) Use ice packs (4 times per day for 3 days) to reduce swelling</li> <li>3) Do not swim for 2 weeks after surgery</li> <li>4) Avoid excessive nose blowing and forceful</li> </ol>		
	<ul> <li>sneezing</li> <li>5) Avoid hot drink and food for the first 24 hours after surgery</li> <li>Observe any wound or nose bleeding</li> </ul>		
	<ul> <li>Advice patient to go to eye clinic during office hour and emergency department immediately after office hour if any complication occurs.</li> <li>Emphasize on follow up</li> </ul>		
Desame antation	compliance.	Safa Sama and Saf	. D 1 1 1 /
Documentation	Kecord procedure	Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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WORK INSTRUCT	TION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in record book / Operation theatre (OT) book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Consent form</li> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>OT list</li> </ul>
Prepare Instruments / Equipment / Medication / Implant	<ul> <li>Make sure bone saw machine (for lateral orbitotomy) works perfectly.</li> <li>Make sure suction and cautery machine work perfectly.</li> <li>Prepare complete &amp; sterile orbital set.</li> <li>Prepare supplementary instruments</li> <li>Prepare solutions.</li> <li>Prepare disposable item.</li> </ul>		<ul> <li>Bone saw machine (if necessary)</li> <li>Suction and bipolar cautery machine</li> <li>Orbitotomy Set</li> <li>*Refer Appendix 11</li> <li>Supplementary instruments <ol> <li>Sterile ruler</li> <li>Sterile marker</li> <li>Illuminated eye loupe</li> <li>Cautery cable and forceps</li> </ol> </li> <li>Solutions <ol> <li>Antiseptic</li> <li>Sterile water</li> <li>Formaldehyde</li> </ol> </li> <li>Disposable item <ol> <li>Eye drape</li> <li>Gauze</li> <li>Cotton bud</li> <li>Ribbon gauze</li> <li>Bone wax (if available)</li> </ol> </li> </ul>
			absorbable suture

	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li><u>Medication</u> <u>Preparation Step</u></li> <li>Local anaesthesia Bupivacaine % Adrenaline 1 in 200,000</li> <li># Administer intravenous dexamethasone stat dose during intraoperation (to liaise with anaesthetist)</li> </ul>		<ul> <li>vii. 6-0 ¼ or 6-0 ¾ absorbable suture</li> <li>viii. 8-0 absorbable suture</li> <li>ix. 4-0 non-absorbable suture</li> <li>• Medication <ul> <li>i. Bupivacaine &amp; Adrenaline injection</li> <li>ii. Ointment antibiotic</li> </ul> </li> </ul>
	<ul> <li>Verify correct implant.</li> <li>Check implant expiry date.</li> </ul>		• Implant i. Orbital mesh or medpor implant (for orbital floor repair).
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Positioning patient in supine position</li> <li>Clean and drape patient's eye with aseptic technique</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i>	<ul> <li>Patient record</li> <li>Antiseptic</li> <li>Eye Drape</li> </ul>
Assist the Procedure	• Hand washing, gowning and gloving using aseptic technique and proper sterile attire.		<ul><li>OT gown</li><li>Sterile glove</li></ul>

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	• Assist doctor and wait for the next instructions	
	<u>Steps (Perform by</u> <u>doctor)</u> 1) Administration of Local anaesthesia 2) Incision.	<u>St</u> <u>A</u> 1 2
	3) Tissue dissection	3
	<ul> <li>4) Procedure performs accordingly i.Avoid sharp instrument to avoid injury on orbital structure</li> <li>ii.Avoid cotton bud upon orbital dissection to prevent orbital inflammation and infection</li> <li>iii.Osteotomy (orbital decompression)</li> <li>iv.Excisional biopsy (for orbital tumour)</li> <li>v.Release of tissue entrapment (for orbital fracture)</li> <li>vi.Drainage of</li> </ul>	4
	abscess 5) Placement of implant in orbital reconstruction	5
	surgery 6) Wound closure in layers i. 8-0 absorbable	6
	suture (for conjunctiva) ii. 6-0 absorbable suture (muscle and soft tissue)	

Steps (Hand over by AMO)

- 1) Local anaesthesia
- 2) Bard Parker handle with blade size 15
- 3) Tooth forceps and Wescott scissors
- 4) Instruments
  - i. Freer and Steven scissor
  - ii. Orbital retractor (malleable) to the surgeon assistant
  - iii. Bone saw/ Chisel and Malleate for osteotomy surgery

5) Implant presoaked with antibiotic (if necessary)

6) Sutures

i. 8-0 absorbable suture

- ii. 6-0 absorbable suture
- iii. 6-0 or 7-0 nonabsorbable suture



Cleaning And Sterilization of Microsurgery Instruments	<ul> <li>iii. 6-0 or 7.0 non- absorbable suture (skin)</li> <li>7) Antibiotic</li> <li>Refer to Cleaning and sterilization of microsurgery instruments guideline.</li> </ul>	Policies and Procedure on Infection Prevention and	7) Ointment antibiotic Refer to Cleaning and sterilization of microsurgery instruments
		control, MOH, 2018 (3 <sup>rd</sup> edition)	guideline.
Health Education	<ul> <li>Post-operative care <ul> <li>Cold compression</li> <li>Observe for retrobulbar hemorrhage</li> <li>STO 1@2 weeks</li> </ul> </li> <li>Observe side effects <ul> <li>complications</li> </ul> </li> <li>Compliance to medication</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	Register patient particulars in patient's record book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation Theatre (OT) list</li> <li>Consent form</li> </ul>	
Prepare Instruments / Equipment / Medication	<ul> <li>Make sure cautery machine works perfectly</li> <li>Prepare complete &amp; sterile strabismus set</li> <li>Prepare solutions</li> <li>Prepare disposable item</li> <li>Verify correct medication</li> <li>Check medication expiry date</li> <li>Check implant expiry date</li> <li>Medication <u>Preparation Step</u> 1) Prepare local</li> </ul>		<ul> <li>Cautery machine.</li> <li>Dressing Set</li> <li>Strabismus set</li> <li>*Refer Appendix 12</li> <li>Solutions <ul> <li>Antiseptic</li> </ul> </li> <li>Disposable item <ul> <li>Cotton bud</li> </ul> </li> <li>Medication <ul> <li>Local Anesthesia</li> <li>Topical Antibiotics</li> </ul> </li> </ul>	
Prepare Patient	<ul> <li>syringe attach with sub tenon needle</li> <li>Inform the patient about the procedure</li> <li>Position patient in supine on the couch</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	<ul><li>Patient record</li><li>Eye Drape</li></ul>	

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	• Clean and drape patient's eye with aseptic technique	
Assist the Procedure	<ul> <li>Hand washing, gowning and gloving using aseptic technique and proper sterile attire</li> <li>Assist doctor and wait for the next instructions</li> </ul>	<ul> <li>Operation Theater gown</li> <li>Sterile glove</li> </ul>
	Steps       (Perform by doctor)         1)       Episcleral stay suture near the limbus (at 6 and 12 o'clock) to anchor the eye	Steps (Hand over by         AMO)         1) Item         i. Silk 4/0         suture         ii. Conjunctiva         forceps         iii. Mosquito         artery         forceps
	2) Fornix-based, winged limbal peritomy – down to bare sclera	2) Westcott scissors
	<ul> <li>3) Blunt dissection to clear Tenon's capsule and inter- muscular septum to reach bare sclera on the side of the muscle and repeat on the opposite side of muscle insertion</li> </ul>	<ul> <li>3) Item <ol> <li>Westcott</li> <li>scissors</li> <li>Non toothed</li> <li>conjunctival</li> <li>forceps</li> </ol> </li> </ul>
	<ul> <li>4) Muscle isolation and exposure</li> <li>5) Whip lock muscle at its insertion (needles kept on suture)</li> </ul>	<ul><li>4) Muscle hook</li><li>5) Item <ol><li>Westcott</li><li>scissors</li></ol></li></ul>

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6) Detachment of muscle at its insertion		<ul> <li>ii. Non toothed conjunctival forceps</li> <li>iii. 6/0 absorbable suture</li> <li>iv. Needle holder</li> <li>6) Item <ol> <li>Muscle hook</li> <li>Wescott tenotomy scissors</li> <li>Muscle</li> </ol> </li> </ul>
		scissors
7) Cauterisation of remaining muscle		7) Cautery and forceps
8) Measurement of		8) Item
length of recession		i. Castroviejo
and position		callipers
marked with		ii. Sterile marker
calliper tip		pen
9) Resection.		9) Item
Reattach muscle to		i. 6/0
sclera at new		absorbable
position using the		suture
two ends of the		ii. St Martin's
previously placed		Forceps
6/0 absorbable		
suture		
10)Reposition		10) Item
conjunctiva		1. Non-toothed
[Wetting eye may		conjunctiva
help differentiate		forceps
conjunctiva (pink)		11. Suture 8/0
from Lenon's		absorbable
capsule (white)]		11) Delenard Calt
auturea stay		Solution
12)Subconjunctival		12) Plunt tin
injection		Scissors
a Sharps and		13) Item
a. Sharps allu		15) 1011
Swabb could	1	

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		b. Apply		i. Toothed
		antibiotic and		Conjunctival
		steroid		Forceps
		ointment		ii. Local anaesthesia
				iii. Ointment
				Antibiotic
Cleaning A	And	Refer to Cleaning and	Policies and Procedure	Refer to Cleaning and
Sterilization	of	sterilization of	on Infection	sterilization of
Microsurgery		microsurgery	Prevention and	microsurgery
Instruments		instruments guideline	control, MOH,	instruments guideline.
			2018 (3rd edition)	
Health Education		<ul> <li>Post-operative care</li> </ul>		
		i. Do not rub the		
		eyes		
		ii. Drop antibiotic and		
		topical steroids to		
		prevent infection		
		and reduce		
		inflammation		
		iii. Do not leave the		
		operated eye wet or		
		exposed to water to		
		avoid any infection		
		iv. Observe the eye		
		alignment to see the		
		effectiveness of the		
		surgery		
		• Observe side effects		
		such as bleeding		
		<ul> <li>Taking medication</li> </ul>		
		• Advice patient to go		
		to eve clinic during		
		office hours or		
		emergency		
		department		
		immediately after		
		office hours if any		
		complication occurs		
		• Emphasize on follow		
		up compliance		
Documentation		Record procedure	Safe Surgery Safe Life	• Procedure book /
		• Document any error	(SSSL)	census.
		Document uny entor		SSSL Form
				- 5556 10111

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OPTHALMOLOGY





WORK INSTRUCTI	ON		
ACTIVITY	WORK PROCESS	STANDARD	REQUIMENT
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status.</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment	<ul> <li>Prepare complete &amp; sterile Trabeculectomy set</li> <li>Prepare supplementary instruments</li> </ul>		<ul> <li>Trabeculectomy set</li> <li>*Refer Appendix 13</li> <li>Supplementary instruments: <ol> <li>Crescent knife</li> <li>15<sup>0</sup> blade</li> <li>Syringe 3ml x 2</li> <li>Syringe 5 ml x 2</li> <li>Syringe 5 ml x 2</li> <li>9/0/ nylon Suture and 10/0 nylon suture</li> <li>8/0 absorbable suture</li> <li>Sponge spear</li> <li>Syringe 20 ml x 2</li> </ol> </li> </ul>
	<ul> <li>Prepare solutions</li> <li>Prepare disposable item</li> </ul>		<ul> <li>Solutions: <ol> <li>Antiseptic</li> <li>Normal saline</li> <li>Balance salt</li> <li>solution</li> </ol> </li> <li>Disposable item: <ol> <li>Eye drape</li> <li>Syringe</li> <li>Sterile gauze and</li> <li>cotton bud</li> </ol> </li> <li>Sterile surgical</li> </ul>

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	• Medication		<ul> <li>v. Needle</li> <li>vi. Dressing set</li> <li>vii. Eye pad</li> <li>Medication: <ul> <li>Mitomycin c</li> <li>Local anaesthesia</li> <li>Topical <ul> <li>anaesthesia</li> </ul> </li> <li>iv. sub conjunctiva <ul> <li>Antibiotics</li> <li>v. Ointment <ul> <li>antibiotic</li> </ul> </li> </ul></li></ul></li></ul>
Prepare Patient	<ul> <li>Verify correct patient.</li> <li>Inform the patient about the procedure.</li> <li>Position patient in supine on the OT table</li> <li>Clean and drape patient's eye with aseptic technique</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i>	Patient record
Assist the Procedure	<ul> <li>Hand washing, gowning, and gloving using aseptic technique and proper sterile attire.</li> <li>Drape patient after cleaning the correct eye</li> </ul>		<ul> <li>OT gown</li> <li>Sterile glove</li> <li>Eye Drape</li> </ul>
	Steps (Perform by doctor) 1) Clean the eye including the eyelids with antiseptic and drane the eye		Steps (Hand over by AMO) 1) Antiseptic and eye drape
	<ol> <li>Local anesthesia is infiltrated to the intended area</li> <li>Perform limbal traction suture</li> </ol>		<ol> <li>local anaesthesia mixture Lignocaine HCL 2% and Bupivacaine HCL 0.5%</li> <li>7/0 absorbable suture</li> </ol>

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4)	The conjunctiva	4)	Westcott and
	is dissected with		conjunctiva
	the limbal base or		0
	fornix based to		
	allow access to		
	the proposal		
	drainage site		
5)	Hemostasis is	5)	Cautery cable
5)	secure with	5)	Cuttery cubic
	conterv		
6)	A small solera	6)	$15^{0}$ blade
0)	flop is fashioned	0)	coliner and
	(rectongular /		Hoskin forcens
	(rectaligular)		Hoskin forceps
	nantial thickness		
	coloro flor is		
	mada magaura		
	Among w Among		
7)	4mm x 4mm	7)	Cinculations
1)		1)	Circulating
	SELL (fluorouro cil		nurse is prepare
	SFU (Interouracia		new sets of
	/ mitomycin C)		gampots and 20
	Prepare separate		mi syringe for
	gallipots with		the anti-
	20ml syringe and		metabolites to
	normal saline to		avoid
	wash		contamination to
			main sets of
			instruments
8)	Perform a	8)	15 <sup>°</sup> blade and
	paracentesis and		Hoskin forceps
	suture		
	a) To enable the		
	surgeon to		
	control the		
	anterior		
	chamber		
	b) Allow		
	instillation of		
	balance salt		
	solution		
	(BSS) and		
	intra		
	operative		
	testing of the		
	patency of the		
	filtration site		
9)	Perform	9)	Puncher
	sclerotomy using		Khaw's / Kelly's
	puncher or/ blade		

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l	1	1	
	10) Perform an		10) Iris forceps and
	iridectomy to		Vanna's scissor
	reduce the risk of		
	iris occluding the		
	aleresterny		
	scierostomy		
	especially in		
	phakic ayes, and		
	to prevent		
	papillary block		
	11) Suture sclera flan		11)9/0 nylon suture
	with 0/0 mulan		$\frac{11}{9}$ $\frac{10}{0}$ myton suture
			01 10/0 Hyloli
	suture or 10/0		suture
	nylon suture		
	12) Suture		12) 10/0 nylon
	conjunctival flap		suture
	with 10/0 nylon		
	suturo		
			12) D 1 1
	13) Test patency by		13) Balance salt
	injecting Balance		solution (BSS)
	salt solution		
	(BSS) through		
	the paracentesis		
	14) Subconjunctival		14) Medication:
	Injection		Devenue of the serve
	Injection		• Dexamethasone
			0.5ml
			<ul> <li>Lignocaine</li> </ul>
			0.5ml
			Cefuroxime
			0.5ml
	15) Apply pad		15) E
			15) Eye pad
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control. MOH.	instruments
	guideline	2018 (3 <sup>rd</sup> edition)	guideline
Health Education	Dest energive core		guidenne.
	Post-operative care		
	<ul> <li>Observed patient</li> </ul>		
	for any		
	abnormalities		
	i. Lid swelling		
	ii. Bleeding at		
	operation site		
	III. Severe eye pain		
	Observe side		
	effects /		
	complications		
	Medication		
	compliance		
1	<ul> <li>Emphasize on</li> </ul>	1	



	follow up compliance		
Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul><li> Procedure book / census.</li><li> SSSL Form</li></ul>

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OPTHALMOLOGY





WORK INSTRUC	WORK INSTRUCTION					
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT			
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>			
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>			
Prepare Instruments / Equipment	<ul> <li>Vitrectomy machine</li> <li>Prepare instruments</li> <li>Prepare solutions</li> <li>Prepare disposable item</li> <li>Medication</li> </ul>		<ul> <li>Make sure Vitrectomy machine works perfectly</li> <li>Vitrectomy set *Refer Appendix 14</li> <li>Solutions: i.Povidone iodine ii.Normal saline</li> <li>Disposable item: <ul> <li>i. Eye drape</li> <li>ii. Syringes</li> <li>iii. Needles</li> <li>iv. 3-way connection</li> <li>v. Sterile gauze and cotton bud</li> <li>vi. Sterile surgical glove</li> </ul> </li> </ul>			
	• Culture media		<ul> <li>vii. Eye pad</li> <li>Medication: <ol> <li>Topical anaesthesia</li> <li>Ropivacaine HCL 2mg/ml</li> </ol> </li> <li>Topical Antibiotics</li> <li>Agar plates and Culture &amp; Sensitivity bottle</li> </ul>			
Prepare Patient	<ul> <li>Inform the patient about the procedure</li> <li>Position patient in supine</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	<ul> <li>Patient record</li> <li>Dilating eye drop</li> <li>Antiseptic solution</li> </ul>			

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OPTHALMOLOGY

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	• Clean and drama	t Eur Druge
	• Clean and drape	• Eye Drape
	patient's eye with	
	aseptic technique	
Assist the	<ul> <li>Hand washing,</li> </ul>	• OT gown
Procedure	gowning, and	• Sterile glove
	gloving using	
	asentic technique	
	aseptie teeninque	
	and proper sterile	
	attire	
	<ul> <li>Drape patient</li> </ul>	• Eye drape
	after cleaning the	
	correct eye	
	5	
	Steps (Perform by	Steps (Hand over by
	doctor)	AMO)
	$\frac{\text{uocior}}{1}$	
	1. Make 5 ports/	1. Infusion port followed
	sclerotomies for	by light pipe and
	infusion, light	vitrectomy cutter
	pipe and	
	vitreous cutter/	
	Occutome	
	2. Use 23, 25G or	2. Trocar 23. 25G or 27G
	27G trocar used	
	in sclerotomies	
	2 Dring in Non	2 New Contest
	5. Bring in Non-	3. Non-Contact
	Contact	Panoramic Viewing
	Panoramic	System (EIBOS/
	Viewing System	BIOM/ Resight) into
	(EIBOS/ BIOM/	position and off OT
	Resight)	light
	4. Start perform	
	vitrectomy	4. Fix 3-way connector to
	without turning	cutter and attach 5cc
	on infusion to	syringe to collect
	collect specimen	synnige to concet
	5 Oneo collect the	specifien
	5. Once conect the	
	specimen, start	5. Start withdraw under
	to complete	surgeon's instruction
	vitrectomy	
	while infusion is	
	turned on	
	6. Once completed	
	the vitrectomy.	6, 7/0 absorbable suture
	suture the	with needle holder
	sclerotomies	with needle holder
	wound	
	7 Droparc	
	7. Prepare	
	subconjunctival	7. Medication:
	injection	• Dexamethasone
		4mg/ml

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	medications in ratio 1:1:1 8. Apply eye pad		<ul> <li>Gentamicin 80mg/2ml</li> <li>Lignocaine HCL 20mg/ml (optional)</li> <li>8. Eye pad</li> </ul>
Cleaning And Sterilization of Microsurgery Instruments	Refer to Cleaning and sterilization of microsurgery instruments guideline.	Policies and Procedure on Infection Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	Refer to Cleaning and sterilization of microsurgery instruments guideline
Health Education	<ul> <li>Post-operative care</li> <li>Positioning as indicated and cleanliness of surgical site</li> <li>Observe side effects / complications</li> <li>Medication compliance</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment	<ul> <li>Make sure Cryo machine works perfectly</li> <li>Prepare supplementary instruments</li> <li>Prepare solutions</li> <li>Prepare disposable item.</li> <li>Medication</li> </ul>		<ul> <li>Cryo machine and probe function</li> <li>Supplementary instruments: <ol> <li>Indental</li> <li>Marking indental</li> <li>Surgical skin marker pen</li> <li>Eye speculum</li> <li>Solutions: <ol> <li>Antiseptic</li> <li>Normal saline</li> </ol> </li> <li>Disposable item: <ol> <li>Eye drape</li> <li>Syringe</li> <li>Sterile gauze and cotton bud</li> <li>Sterile surgical glove</li> <li>Needles</li> <li>Eye pad</li> <li>Medication: <ol> <li>Topical anaesthesia</li> <li>Topical Antibiotics</li> </ol> </li> </ol></li></ol></li></ul>
Prepare Patient	<ul> <li>Inform the patient about the procedure</li> <li>Position patient in supine on the OT table</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	<ul> <li>Patient record</li> <li>Dilating eye drop</li> <li>Eye Drape</li> <li>Instil Topical anaesthesia</li> </ul>

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	• Clean and drape		
	patient's eye with		
	aseptic technique		
Assist the Procedure	Hand washing,		OT gown and
	gowning, and		sterile glove
	gloving using		U
	aseptic technique		
	and proper sterile		
	attire		
	• Drape patient after		• Eye drape
	cleaning the		5 1
	correct eye		
	-		
	Steps (Perform by		Steps (Hand over by
	doctor)		<u>AMO)</u>
	1) Fix speculum in		1) Eye speculum
	position		
	2) Use indental to		2) Indental
	find the location of		
	retinal break		
	3) After identify, use		3) Marker indental
	marker indental to		
	4) The rating break		1) Surgical skip
	4) The retinal break		4) Surgical Skill
	with surgical skin		marker pen
	marker to avoid		
	misallocation		
	5) Place the cryo		5) Skin marker nen
	probe on the spot		and cryo probe
	of retinal break		una erje prese
	and press the pedal		
	to start the		
	procedure		
	6) Once done,		6) Cryo machine
	release pedal		pedal
	7) Instil Antibiotics		7) Antibiotic drop
	8) Apply eye pad		8) Eye pad
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
TT 14 TD 1	guideline	$2018 (3^{10} \text{ edition})$	guideline
Health Education	Post-operative care		
	Positioning as		
	indicated and		
	cleanliness of		
1	surgical site		

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	<ul> <li>Observe side effects / complications</li> <li>Medication compliance</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census</li> <li>SSSL Form</li> </ul>

Albert, D. M., Jakobiec, F. A., & Miller, J. W. (2008). Albert & Jakobiec's principles and practice of ophthalmology. Saunders/Elsevier.

Chignell, A. H. (2012). Retinal Detachment Surgery. Springer Science & Business Media.

Sadda, S. R., Schachat, A. P., Wilkinson, C. P., Hinton, D. R., Wiedemann, P., K. Bailey Freund, & Sarraf, D. (2022). *Ryan's Retina E-Book*. Elsevier Health Sciences.





WORK INSTRUCTION			
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	<ul> <li>Register patient particulars in patient's record book</li> </ul>	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment	<ul> <li>Make sure Vitrectomy machine works perfectly (for combined procedure)</li> <li>*Refer to vitrectomy guidelines</li> <li>Prepare function Binocular Indirect Ophthalmoscope (B.I.O) and sterile lens</li> <li>Prepare micro instrument set</li> <li>Prepare functioning Cryo / laser machine</li> <li>Prepare supplementary items</li> </ul>		<ul> <li>Vitrectomy machine</li> <li>Vitrectomy machine</li> <li>Lens pan retina 2.2 / 20D / 30D</li> <li>Instrument: <ol> <li>Vitreoretinal set / Buckle set</li> <li>Refer Appendix 14</li> <li>Cryo probe / laser probe</li> </ol> </li> <li>Supplementary items: <ol> <li>Band type 40/41/240/</li> <li>Tires -276</li> <li>Suture 2/0 silk</li> <li>Suture 5/0 braided polyester</li> <li>Intraocular gas – C3F8 / SF6</li> </ol> </li> </ul>
	<ul> <li>Prepare solutions</li> </ul>		Solutions:

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[			
			i.Antiseptic
			ii.Normal saline
	<ul> <li>Prepare</li> </ul>		• Disposable item:
	disposable item		i. Eye drape
	1		ii. Svringe
			iii Sterile gauze and
			cotton bud
			iv Starila averaisal alava
			IV. Sterne surgical glove
			v. Needles
			vi. Surgical marker pen
			v11. Eye pad
	<ul> <li>Medication</li> </ul>		<ul> <li>Medication:</li> </ul>
			i.Topical Anaesthesia
			ii.Local Anaesthesia -
			Ropivacaine HCL
			2mg/ml
			iii Topical Antibiotics
Prenare Patient	• Inform the nationt	Malaysian Patient	Datient record
r repare r attent		Safaty Goal 2.0	• Fallent lecold
		Safety Obai 2.0	
	procedure		
	<ul> <li>Position patient in</li> </ul>	Manual Aranan	
	supine	Kerja	• Dilating ave drop
	<ul> <li>Ensure full</li> </ul>		• Dhaning eye drop
	pupillary dilation		
	• Clean and drape		• Eve Drane
	patient's eve with		Lje Liupe
	asentic technique		
Assist the	1 Hand washing		• OT gown and Sterile
Procedure	gowning and		glove
Tiocedure	gloving using		giove
	gioving using		
	and proper		
	sterile attire		
	2. Drape patient		<ul> <li>Eye drape</li> </ul>
	after cleaning		
	the correct eye		
	Steps (Perform by		Steps (Hand over by
	doctor)		AMO)
	1) 360 degree /		1) Conjunctiva
	limited peritomy		forceps and blunt
	1 5		Wescott seissors
	2) Isolate rectus		2) Squint hook $2/0$
	muscle and		and $4/0$ silk suture
	annly bridle		and 4/0 Sirk Suture.
	appry offute		
	Sutures by $2/0$ or $4/0$ =:11		
	4/U S11K		
	3) Surgeon		3) Binocular indirect
	examines fundus		ophthalmoscope
	by Binocular		

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	indirect ophthalmoscope to localised the retinal break accurately. Retinal breaks are marked by		with lens and marker pen
	<ul> <li>marker pen</li> <li>4) Cryotherapy / laser is applied to ratingl break</li> </ul>		4) Cryotherapy probe
	<ul> <li>5) Appropriately sized / type</li> <li>explant is chosen</li> </ul>		5) Band and tires
	<ul><li>6) Tire and band are sutured to sclera and tied</li></ul>		6) 5/0 braided polyester suture, sleeve and band
	<ul> <li>7) Occasionally gas         <ul> <li>/ air may be</li> <li>injected into the</li> <li>globe using 27-</li> <li>gauge needle</li> </ul> </li> </ul>		<ul><li>7) Gas, needle and cotton bud as indicated</li></ul>
	<ul> <li>8) Repeat fundus         examination         with Binocular         Indirect         Ophthalmoscope         to check central         retina artery         perfusion and</li> </ul>		8) Binocular Indirect Ophthalmoscope (B.I.O) and lens
	<ul> <li>9) The peritomy is closed with 7/0 absorbable</li> </ul>		9) 7/0 absorbable suture
	10) Prepare subconjunctival injection medications in ratio 1:1:1		<ul> <li>10) Medication:</li> <li>Dexamethasone 4mg/ml</li> <li>Gentamicin 80mg/2ml</li> <li>Lignocaine HCL</li> </ul>
			2% 20mg/ml
	11\ 4 1 1		(optional) 11) Eve nad
Cleaning And	11) Apply eye pad	Doliging and	Pafar to Classing and
Sterilization of Microsurgery	and sterilization of microsurgery	Procedure on Infection	sterilization of microsurgery instruments

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	instruments guideline	Prevention and control, MOH, 2018 (3 <sup>rd</sup> edition)	
Health Education	<ul> <li>Post-operative care</li> <li>Positioning as indicated and</li> <li>Cleanliness of surgical site</li> <li>Observe side effects / complications</li> <li>Medication compliance</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	Record procedure	Safe Surgery Safe Life (SSSL)	<ul><li> Procedure book / census</li><li> SSSL Form</li></ul>

- Brinton, D. A., Wilkinson, C. P., & Hilton, G. F. (2009). *Retinal detachment: principles and practice*. Oxford University Press; In cooperation with the American Academy of Ophthalmology.
- Kreissig, I. (2005). *Primary retinal detachment options for repair; with 20 tables*. Berlin Heidelberg New York Springer.
- Ulrich Spandau, Tomic, Z., & Ruiz-Casas, D. (2023). *Retinal Detachment Surgery and Proliferative Vitreoretinopathy*. Springer Nature.



	VITRECTOMY
INTRODUCTION	Vitrectomy is a type of eye surgery used to treat various retina and
	vitreous problems. It involves the removal of the vitreous and
	local regional or general anaesthesia
SCOPE	The procedure will be assisted by a privileged Assistant Medical
SCOL	Officer (AMO).
	• All patient indicated for vitrectomy surgery.
SPECIFIC	• Diagnostic
OBJECTIVE	a. Intraocular infection
	b. Intraocular Inflammation
	c. Intraocular tumour
	• Therapeutic
	a. Complication of diabetic eye disease
	b. Retinal detachment
	c. Vitreous haemorrhage secondary to others
	d. Macula diseases
	e. Ocular Trauma
	f. Cataract surgery complication
	g. Intraocular infection
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WORK INSTRUCTI	ON		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient /Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment	<ul> <li>Prepare machine</li> <li>Ensure optimum compressed air pressure</li> <li>Ensure correct vitrectomy parameter (IOP) and setting for core and shaving mode</li> <li>Prepare complete Vitrectomy set.</li> <li>Microscope and</li> </ul>		<ul> <li>Vitrectomy machine</li> <li>Endo laser machine</li> <li>Cryotherapy machine</li> <li>Vitrectomy set</li> <li>*Refer Appendix 14</li> <li>Non-Contact</li> </ul>
	<ul> <li>Prepare supplementary instruments</li> <li>Prepare disposable item</li> <li>Prepare Intra operative adjuvant</li> </ul>		<ul> <li>Panoramic Viewing System (EIBOS/BIOM/ Resight)</li> <li>Supplementary instruments: <ol> <li>Cryotherapy probe</li> <li>Disposable items:</li> <li>Eye drape</li> <li>Sterile gauze and cotton bud</li> <li>Needle 26G</li> <li>Endo-laser probe</li> <li>Eye pad</li> </ol> </li> <li>Intra operative adjuvant (as indicated):</li> <li>Membrane staining</li> <li>Heavy liquid</li> </ul>

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	• Prepare tamponade i. Gas preparation, example, 14% C3F8 gas= 7cc of pure C3F8 gas + 43cc air in 50cc syringe (attach syringe with air filter before withdrawal of gas)		• Intra ocular tamponade (as indicated): i.Silicone oil 1000/ 2000/ 5000 ii.Gas C3F8 / SF6
	• Prepare solutions		• Solutions: i. Antiseptic ii. Normal saline iii. Balance salt solution
D	<ul> <li>Verify correct medication.</li> <li>Check medication expiry date</li> </ul>		Medication:     i. Triamcinolone     Acetonide     40mg/ml     ii. Ropivacaine HCL     2mg/ml     iii. Topical     anaesthesia     iv. Topical antibiotic
Prepare Patient	<ul> <li>Inform the patient about the procedure</li> <li>Position patient in supine</li> <li>Clean and drape patient's eye with aseptic technique</li> </ul>	Malaysian Patient Safety Goal 2.0 <i>Manual Arahan</i> <i>Kerja</i> Safe Surgery Safe Life (SSSL)	<ul> <li>Patient record</li> <li>Dilating eye drop</li> </ul>
Assist the Procedure	• Hand washing, gowning, and gloving using aseptic technique and proper sterile attire		<ul><li>OT gown</li><li>Sterile glove</li></ul>
	Steps (Perform by doctor) 1) Make 3 ports / sclerotomies for infusion, light pipe and vitreous cutter. Use 23G /25G/ 27G trocar used for sclerotomies		<u>Steps (Hand over by</u> <u>AMO)</u> 1) Trocar

	(as preferred /		
	available)		
	2) Pass on infusion		2) Infusion line, light
	port followed		pipe and vitreous
	by light pipe		cutter 23G /25G/
	and vitrectomy		27G
	cutter to start		
	vitrectomy		
	procedure		
	<ol><li>Bring in Non-</li></ol>		<ol><li>Panoramic</li></ol>
	Contact		Viewing System
	Panoramic		(EIBOS/BIOM/
	Viewing		Resight)
	System		
	(EIBOS/BIOM/		
	Resight) into		
	position and off		
	OT light		
	<ol><li>Prepare and</li></ol>		<ol><li>Intra ocular</li></ol>
	standby		tamponade (as
	supplementary		indicated):
	item as		<ul> <li>Silicone oil</li> </ul>
	requested		1000/2000/5000
	according to		• Gas C3F8 / SF6
	additional		
	procedure		5) Maliatian
	5) Prepare		5) Medication:
	subconjunctival		• Dexamethasone
	injection		4mg/ml
	medications in		• Gentamicin
	ratio 1:1:1		80mg/2ml
			• Lignocaine HCL
			2 % 20mg/ml
			(optional)
	6) Sub conjunctival		6) Sub conjunctival
	injection given		injection in
	by doctor at the		syringe
	end of the		
	operation 7) Clean sumpical		7) Course
	/) Clean surgical		/) Gauze
	area with dry		
	8) Apply optimized		8) Ointment
	of Apply onlinent		antibiotic
	annoione 9) Apply eve ped		9) Eve pad
Cleaning And	Refer to Cleaning	Policies and	Pefer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments guideline	and control MOH	instruments guideline
monumento	instrumento guidenne	$2018 (3^{rd} edition)$	monumento guidenne

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Health Education	Post-operative care		
	<ul> <li>Positioning as</li> </ul>		
	indicated and		
	cleanliness of		
	surgical site		
	<ul> <li>Observe side</li> </ul>		
	effects /		
	complications		
	<ul> <li>Medication</li> </ul>		
	compliance		
	<ul> <li>Emphasize on</li> </ul>		
	follow up		
	compliance		
Documentation	<ul> <li>Record procedure</li> </ul>	Safe Surgery Safe	Procedure book /
		Life (SSSL)	census.
			SSSL Form

Jain, A., Natarajan, S., & Saxena, S. (2021). *Cutting-edge Vitreoretinal Surgery*. Springer Nature.

Paulo, Berger, A. R., & Chow, D. (2016). Vitreoretinal instruments: vitrectomy cutters, endoillumination and wide-angle viewing systems. *International Journal of Retina* and Vitreous, 2(1). https://doi.org/10.1186/s40942-016-0052-9

Williamson, T. H. (2013). Vitreoretinal Surgery. Springer Science & Business Media.





WORK INSTRUCTION						
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT			
Receive Patient	Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>			
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>			
Prepare Instruments / Equipment	<ul> <li>Prepare gas</li> <li>Prepare supplementary item</li> <li>Prepare solutions</li> <li>Prepare disposable item</li> <li>Medication</li> </ul>		<ul> <li>Gas</li> <li>i. 100 % for SF6 or 100 % for C3F8</li> <li>Supplementary instruments: <ol> <li>Hammer extension tubing</li> <li>Gas filter</li> <li>Gas filter</li> <li>3-way connector</li> <li>Solutions: <ol> <li>Antiseptic</li> <li>Normal saline</li> <li>Disposable item:</li> <li>Eye drape</li> <li>Syringe</li> <li>Sterile gauze and cotton bud</li> <li>Sterile surgical glove</li> <li>Needles</li> <li>Eye pad</li> <li>Medication:</li> <li>Topical anaesthesia</li> <li>Topical Antibiotics – Ointment artibiotics</li> </ol> </li> </ol></li></ul>			
Prepare Patient	<ul> <li>Verify correct patient</li> <li>Inform the patient about the procedure</li> </ul>	Malaysian Patient Safety Goal 2.0 Manual Arahan Kerja	<ul><li>Patient record</li><li>Dilating eye drop</li></ul>			

	<ul> <li>Position patient</li> </ul>		
	in supine		
	• Clean and drape		
	patient's eve with		
	aseptic technique		
Assist the	1) Hand washing		• OT gown and Sterile
Procedure	gowning and		glove
1100000000	gloving using		giove
	asentic		
	technique and		
	proper sterile		
	attire		
	2) Drape patient		• Eve drane
	after cleaning		e Lye drupe
	the correct eve		
	*Refer to		
	vitrectomy		
	guidelines		
	8		
	Steps (Perform by		Steps (Hand over by AMO)
	doctor)		<u></u>
	1) Perform an		1) Gas injection 100 % for
	anterior chamber		SF6(0.5) or 100 % for C3F8
	paracentesis to		(0.3) with instructed by
	remove 0.1 to 0.25		doctor
	mL of aqueous		
	humor.		
	2) Inject gas bubble		2) prepare gas injection -
	using a small		
	needle.		
	3) Sub conjunctival		3) Medication:
	antibiotic given by		i. Dexamethasone 0.5ml
	doctor		ii. Cefuroxime 0.5ml
			iii. Lignocaine HCL 2%
			0.5ml
	0.01		0.0
	4) Clean surgical		4) Gauze
	area with dry and		
	wet gauze		5) Antihistic sinterent
	s) Apply anubiotic		5) Antibiotic omtiment
	6) Apply eve pad		6) Eve pad
Cleaning And	oj Appiy eye pau	Policies and	Refer to Cleaning and
Sterilization of	Refer to Cleaning	Procedure on	sterilization of microsurgery
Microsurgery	and sterilization of	Infection	instruments guideline
Instruments	microsurgery	Prevention and	monumento guidenne
monumento	instruments	control MOH	
	guideline	$2018 (3^{rd} edition)$	
Health Education	Post-operative care	2010 (0 Canton)	

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Documentation	<ul> <li>Positioning as indicated and</li> <li>Cleanliness of surgical site</li> <li>Observe side effects / complications</li> <li>Advice patient to go to eye clinic during office hour and emergency department after office hour if any complication occurs</li> <li>Medication compliance</li> <li>Emphasize on follow up compliance</li> </ul>	Safe Surgery Safe	Procedure book / census
Documentation	• Record procedure	Life (SSSL)	SSSL Form

Borowicz, D., Nowomiejska, K., Nowakowska, D., Brzozowska, A., Toro, M. D., Avitabile, T., Jünemann, A. G., & Rejdak, R. (2019). Functional and morphological results of treatment of macula-on and macula-off rhegmatogenous retinal detachment with pars plana vitrectomy and sulfur hexafluoride gas tamponade. *BMC Ophthalmology*, 19(1).

Sebag, J. (2012). The Vitreous. Springer Science & Business Media.

Ryan, S. J. (2001). Retina: Medical retina.

Yanoff, M., & Sassani, J. W. (2009). Ocular pathology. Mosby.






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WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patient's record book	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient</li> <li>Verify correct site</li> <li>Verify correct procedure</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken.</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment	<ul> <li>Make sure Vitrectomy machine works perfectly</li> <li>Prepare Vitrectomy set</li> <li>Prepare solutions</li> <li>Prepare disposable item</li> </ul>		<ul> <li>Vitrectomy machine</li> <li>Vitrectomy set</li> <li>*Refer Appendix 14</li> <li>Solutions: <ul> <li>i.Povidone iodine</li> <li>ii.Normal saline</li> </ul> </li> <li>Disposable item: <ul> <li>i. 23G MVR</li> <li>blade or Trocar</li> <li>system</li> <li>ii. Light pipe</li> <li>iii. Eye drape</li> <li>iv. Syringe 20cc</li> <li>v. Sterile gauze</li> <li>and cotton bud</li> <li>vi. Sterile surgical</li> <li>glove</li> <li>vii. Needle</li> <li>viii. Eye pad</li> <li>Medication:</li> <li>i.Topical</li> <li>anaesthesia</li> <li>ii.Topical</li> <li>Antibiotics</li> </ul> </li> </ul>
Prepare Patient	• Verify correct patient	Malaysian Patient Safety Goal 2.0	Patient record

	<ul> <li>Inform the patient about the procedure</li> <li>Position patient in supine</li> <li>Clean and drape patient's eye with aseptic technique</li> </ul>	Manual Arahan Kerja	<ul><li>Antiseptic solution</li><li>Eye drape</li></ul>
Assist the Procedure	• Hand washing, gowning, and gloving using aseptic technique and proper sterile attire		<ul><li>OT gown</li><li>Sterile glove</li></ul>
	• Drape patient after cleaning the correct eye		• Eye Drape
	<u>Steps (Perform by</u> <u>doctor)</u> Manual or vitrectomy machine		<u>Steps (Hand over by</u> <u>AMO)</u>
	1) Make 2 ports/ sclerotomies for infusion, and light pipe		<ol> <li>Infusion port followed by light pipe.</li> </ol>
	<ul> <li>2) Use 23/25G or 27G trocar used in sclerotomies</li> </ul>		2) 23/25G or 27G trocar
	3) Using 20 cc syringe to withdraw silicone oil		3) 20 cc syringe to doctor
	<ul> <li>4) Bring in Non- Contact Panoramic Viewing System (EIBOS/BIOM / Resight) into position and off OT light</li> </ul>		4) Non-Contact Panoramic Viewing System (EIBOS/BIOM / Resight)
	5) Inspection on posterior pole for identify current state of optic disc and retina		5) Observe
	6) Removal of sclerotomies and suture		6) Pass plug forceps, needle holder and suture

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			7/0 absorbable to
			the surgeon to
			close the wound
	7) Apply eye pad		7) Eye pad
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
	guideline	2018 (3 <sup>rd</sup> edition)	guideline
Health Education	Post-operative care		
	<ul> <li>Positioning as</li> </ul>		
	indicated and		
	cleanliness of		
	surgical site		
	Observe side		
	effects /		
	complications		
	Medication		
	compliance		
	• Emphasize on		
	follow up		
	compliance		
Documentation	Record procedure	Safe Surgery Safe	Procedure book /
	i neccita procedure	Life (SSSL)	census
		2 (0002)	• SSSI Form

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Peyman, G. A. (2019). Vitreoretinal Surgical Techniques, Second Edition. Routledge.







WORK INSTRUCTION				
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT	
Receive Patient	• Register patient particulars in patient's record book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>	
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation Theatre (OT) list</li> <li>Signed consent form</li> </ul>	
Prepare Instruments / Equipment / Medication	<ul> <li>Make sure diathermy machine works perfectly.</li> <li>Prepare complete &amp; sterile evisceration set.</li> <li>Prepare supplementary instruments</li> <li>Prepare disposable item.</li> <li>Verify correct medication.</li> <li>Check medication expiry date.</li> <li>Verify correct implant.</li> <li>Check implants</li> </ul>		<ul> <li>Diathermy machine.</li> <li>Evisceration Set.</li> <li><b>Refer Appendix</b></li> <li>15</li> <li>Supplementary instruments <ol> <li>Cautery forceps and cable</li> <li>Disposable item</li> <li>Dressing set</li> <li>T/0 absorbable suture</li> <li>Eye drape</li> <li>V. Syringes &amp; needles</li> <li>V. Sterile gauze</li> <li>Vi. Cotton bud</li> <li>Medication</li> <li>Cloxacillin powder 1000mg</li> <li>Adrenaline 1mg/ml</li> <li>Topical Antibiotics</li> <li>Implant</li> <li>Orbital implants</li> <li>Conformer</li> </ol> </li> </ul>	

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Prepare Patient	Verify correct	Malaysian Patient	<ul> <li>Patient record</li> </ul>
-	patient.	Safety Goal 2.0	Antiseptic
	<ul> <li>Inform the patient</li> </ul>		• Eye Drape
	about the		
	procedure.		
	<ul> <li>Prepare patient in</li> </ul>		
	supine position.		
	<ul> <li>Clean and drape</li> </ul>		
	patient's eye with		
	aseptic technique		
Assist the Procedure	<ul> <li>Hand washing,</li> </ul>		• OT gown
	gowning and		Sterile glove
	gloving using		_
	aseptic technique		
	and proper sterile		
	attire.		
	<ul> <li>Assist doctor and</li> </ul>		
	wait for the next		
	instructions.		
			G (II 1 1
	Steps (Perform by		Steps (Hand over by
	<u>doctor</u> )		<u>AMO)</u>
	1) 360-degree		1) Conjunctival
	conjunctival		forceps and
	peritomy done.		scissors
	2) Cornea incision		2) Cornea scissors
	near limbus, uveal		and forceps with
	tissue removed.		Bunge evisceration
			spoon
	3) Bleeding secured		3) Ribbon gauze
	using Adrenaline-		soaked with
	soaked ribbon		adrenaline and
	gauze and		diathermy
	diathermy.		
	4) Cloxacillin		4) Cloxacillin
	powder 1000mg		powder 1000mg
	was put in the		
	sclera cavity.		
	5) Sclera and		5) 7/0 absorbable
	conjunctiva closed		suture
	using interrupted		
	absorbable suture		
	//0		000
	6) Ointment		6) Ointment
	antibiotic applied		antibiotic
	() Eye padding and		() Eye pad and
	elastic adhesive		elastic adhesive
	bandage.		bandage

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Cleaning And Sterilization of Microsurgery	Refer to Cleaning and sterilization of microsurgery	Policies and Procedure on Infection Prevention	Refer to Cleaning and sterilization of microsurgery
Instruments	instruments	and control, MOH,	instruments
	guidenne.	2018 (3 edition)	guidenne.
Health Education	<ul> <li>Observe side effects / complications</li> <li>Emphasize on follow up compliance</li> </ul>		
Documentation	• Record procedure	Safe Surgery Safe Life (SSSL)	<ul> <li>Procedure book / census.</li> <li>SSSL Form</li> </ul>

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- Johnson, T. E. (2020). Anophthalmia: the expert's guide to medical and surgical management. Springer.
- Yen, M. T., & American Academy of Ophthalmology. (2012). *Surgery of the eyelids, lacrimal system, and orbit.* Oxford University Press in Cooperation With The American Academy Of Ophthalmology.





WORK INSTRUCT	ION		
ACTIVITY	WORK PROCESS	STANDARD	REQUIREMENT
Receive Patient	• Register patient particulars in patient's record book.	Malaysian Patient Safety Goal 2.0	<ul> <li>Patient appointment card / record</li> <li>Record book / census</li> </ul>
Assess / Verify Patient / Correct Site / Allergy Status	<ul> <li>Verify correct patient.</li> <li>Verify correct site.</li> <li>Verify correct procedure.</li> <li>Verify allergy status</li> <li>Ensure written consent has been taken</li> </ul>	Manual Arahan Kerja Safe Surgery Safe Life (SSSL) Malaysian Patient Safety Goal 2.0	<ul> <li>Safe Surgery Safe Life (SSSL) Form</li> <li>Operation Theatre (OT) list</li> <li>Signed consent form</li> </ul>
Prepare Instruments / Equipment / Medication	<ul> <li>Make sure diathermy machine works perfectly.</li> <li>Prepare complete &amp; sterile enucleation set.</li> <li>Prepare supplementary instruments</li> <li>Prepare solutions.</li> <li>Prepare disposable item.</li> </ul>		<ul> <li>Diathermy machine.</li> <li>Enucleation Set.</li> <li>*Refer Appendix 15</li> <li>Supplementary instruments <ul> <li>Cautery cable and forceps</li> <li>Solutions</li> <li>Antiseptic</li> <li>Sterile water</li> </ul> </li> <li>Disposable item <ul> <li>Disposable item</li> <li>Dressing set</li> <li>Eye drape</li> <li>4/0 or 5/0 non-absorbable suture</li> <li>v. 6/0 absorbable suture</li> <li>v. Syringes &amp; needles</li> <li>vi. Sterile gauze</li> <li>vii. Cotton bud</li> <li>Medicated paraffin gauze</li> <li>ix. Absorbent pads</li> <li>Medication</li> </ul> </li> </ul>

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	<ul> <li>Check medication</li> </ul>		i. Adrenaline
	expiry date.		1mg/ml
	Verify correct		• Implant
	implant.		i. Orbital implants
	Check implants		ii. Conformer
	expiry date.		
Prepare Patient	Verify correct	Malaysian Patient	<ul> <li>Patient record</li> </ul>
	patient.	Safety Goal 2.0	
	• Inform the patient		
	about the		
	procedure.		
	• Prepare patient in		
	supine position.		
	• Clean and drape		• Antiseptic
	patient's eye with		• Eye Drape
	aseptic technique		
Assist the Procedure	<ul> <li>Hand washing,</li> </ul>		• OT gown
	gowning and		<ul> <li>Sterile glove</li> </ul>
	gloving using		
	aseptic technique		
	and proper sterile		
	attire.		
	<ul> <li>Assist doctor and</li> </ul>		
	wait for the next		
	instructions.		
	Steps (Perform by		Steps (Hand over by
	doctor)		AMO)
	<u></u>		<u></u>
	1) Conjunctiva		1) Conjunctival
	peritomy		forceps and
			scissors
	2) Isolation of all		2) 4/0 or 5/0 non-
	recti muscle.		absorbable suture
			and conjunctival
			scissors
	3) Introduce		3) Enucleation
	enucleation spoon		spoon and
	to enucleate the		enucleation scissor
	eyeball.		4) D 11
	4) Secure all		4) Kibbon gauze
	ribbon gauge		soaked with
	acaled with		Aurenaline and
	A drenaling and		ulauleriny
	diathermy		
	5) Introduce orbital		5) Correct size of
	implant into		orbital implant
	socket		
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			soaked in antibiotics
	6) Wound closure		6) 6/0 absorbable
	layer by layer.		suture
	7) Placement of		7) Conformer
	conformer		
	8) Eye padding and		8) Eye pad and
	elastic adhesive		elastic adhesive
	bandage.		bandage
Cleaning And	Refer to Cleaning	Policies and	Refer to Cleaning
Sterilization of	and sterilization of	Procedure on	and sterilization of
Microsurgery	microsurgery	Infection Prevention	microsurgery
Instruments	instruments	and control, MOH,	instruments
	guideline.	2018 (3rd edition)	guideline.
Health Education	<ul> <li>Observe side</li> </ul>		
	effects /		
	complications		
	Emphasize on		
	follow up		
	compliance		
Documentation	<ul> <li>Record procedure</li> </ul>	Safe Surgery Safe	Procedure book /
		Life (SSSL)	census.
			<ul> <li>SSSL Form</li> </ul>

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- Johnson, T. E. (2020). Anophthalmia: the expert's guide to medical and surgical management. Springer.
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# APPENDICES APPENDICES

# Appendix 1: Toilet and Suturing (T&S) Set

- 1. Sterilizing case with silicone mat to contain following instruments size: 265 x 160 x 25mm
- 2. Elschnig fixation forceps, 1 x 2 angled teeth
- 3. McPherson tying forceps, 5mm long smooth jaws for 8-0 to 11-0 suture, straight
- 4. Straight corneal tying forceps, 1 x 1 pierse teeth of 0.1mm very delicate
- 5. Castroviejo needle holder
- 6. Strabismus forceps
- 7. Barraquer eye specula for children
- 8. Barraquer eye specula adults
- 9. Eye scissors, straight, 10cm
- 10. Westcott scissors, curved blunt tips
- 11. Surgical Blade handle
- 12. Eye scissors, blunt straight

# Appendix 2: Incision and curettage (I&C) Set

- 1. Meyerhoefer chalazion curette
  - Size: 1.0mm diameter
  - Size: 1.5mm diameter
  - Size: 2.0mm diameter
  - Size: 2.5mm diameter
  - Size: 3.0mm diameter
- 2. BP handle no.3
- 3. Hunt chalazion forceps
- 4. Bonaccolto strabismus forceps
- 5. Eye scissors, 9cm, straight
- 6. Kidney dish 20.6 x 9.5 x 3.8cm w/o cover
- 7. Gallipot, 6 oz,
- 8. Sterilizing case with silicone mats to contain above instruments, 265 x 160 x 25mm

- 9. Baird chalazion forceps
- 10. Desmarres chalazion forceps 20mm

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#### **Appendix 3: Pterygium Set**

- 1. Eye speculum, Libermann, k wire, adjustable
- 2. Iris forceps, 1 x 2 teeth, curved, 100mm, 4"
- 3. Eye dressing forceps, straight, s/steel, 100mm, 4"1mm tip
- 4. Bishop-Harmon dressing forceps, straight, 0.7mm
- 5. Barraquer needle holder, curved without catch
- 6. St Martin suture forceps, straight, 1 x 2 teeth, stainless steel, 75mm, 3"
- 7. Bishop-Harmon anterior chamber irrigator, includes19G gauge angled cannula, adaptor and silicone bulb complete
- 8. Vannas micro scissors, straight sharp / sharp points80mm
- 9. Iris scissors, straight, sharp / sharp points, 110mm, 4 1/4"
- 10. Tooke corneal knife, smooth, 3 x 18mm. blade, 119mm.
- 11. Bard-Parker handle, size 3
- 12. Kidney tray, 250 mm, 10"
- 13. Gallipot, stainless steel, capacity of 2 ozs.
- 14. Gallipot, stainless steel, capacity of 4 ozs.
- 15. Sponge holder forceps, 18cm
- 16. Plastic sterilizing case with silicon mats265 x 160 x25mm for 10 to 15 instruments

#### **Appendix 4: Cataract Set (Phacoemulsification)**

- 1. Kratz-Barraquer wire speculum with open blades, large
- 2. Phaco diamond knife double lancet with blunt sides, 2.75mm wide
- 3. Single edge diamond knife, 30 deg. 1mm wide
- 4. Super sharp sterile, disposable (pk/6) #75-15 green, 15°, 5.0mm
- 5. Chuck handle #3K round 10cm
- 6. Bishop-Harmon anterior chamber irrigator include 19 gauge angled cannula, adaptor and blue silicone bulb complete
- 7. Hartmann mosquito forceps extra delicate100mm, long straight
- 8. Halsted mosquito forceps, delicate5 3/4" (145mm) curved
- 9. Jaffe-bechert lens nucleus rotator blunt forked, tip angled at 9mm
- 10. Kuglen iris hook and lens manipulator, angled
- 11. Westcott tenotomy scissors curved, blunt tips,
- 12. Stern-Gills scissors, extra thin 10mm long blades, sharp points, angled forward
- 13. Harms-colibri forceps, very delicate 1 x 2 teeth0.12mm with tying platform
- 14. Castroviejo suturing forceps 1 x 2 teeth with0.12mm, tying platform
- 15. Elsching fixation forceps 1x2 teeth angled teeth
- 16. Bonaccolto conjunctiva forceps longitudinally serrated jaws with cross serration at tips12mm wide
- 17. Tennant tying forceps with guide pin extra delicate smooth jaws with 6mm long platform for 9-0 to 11-0 sutures, straight
- 18. Tennant tying forceps with guide pin extra delicate smooth jaws with 6mm long platform for 9-0 to 11-0 sutures, curved
- 19. Castroviejo needle holder standard jaws without lock, straight
- 20. Katena needle holder extra delicate jaws without lock, curved
- 21. McIntyre anterior chamber cannula 30G
- 22. Air injection cannula 27G



- 23. Katena instrument caddy double level, with removable lid. 325 x 265 x 42mm
- 24. Simcoe I/A cannula 23G
- 25. Simcoe cortex extractor cannula smooth closed tip with side opening facing into curved23 gauge (21mm)
- 26. Rampley serrated jaw, box joint, straight, 25cm
- 27. Gallipot, 6 oz,
- 28. Kidney dish 20.6 x 9.5 x 3.8cm
- 29. Lieberman speculum K-wire

# Appendix 5: Extra Capsular Cataract Extraction (ECCE) Set

- 1. Bishop-Harmon anterior chamber irrigator includes 19 gauge angled cannula, adaptor and blue silicone bulb, complete
- 2. Baby Jones towel clamp cross-action2 1/4" (55mm) long
- 3. Hartmann mosquito forceps100mm long straight
- 4. Barraquer wire speculum large
- 5. Barraquer wire speculum large
- 6. Chuck handle #3K round 10cm
- 7. Castroviejo corneoscleral scissors small blades right
- 8. Castroviejo corneoscleral scissors small blades left
- 9. Westcott tenotomy scissors curved blunt tips
- 10. Westcott stitch scissors very sharp pointed tips
- 11. Stern-Gills scissors, extra thin 10mm long angled forwards
- 12. Castroviejo caliper, 20mm spread straight
- 13. Bonaccolto conjunctiva forceps longitudinally serrated jaws with cross serration at tips
- 14. Elschnig forceps
- 15. Harms-Colibri forceps, very delicate1 x 2 teeth, 0.12mm with tying platform
- 16. Step diamond knives B=1.00, L=3.00, D=0.20, A=45°, s=1.00
- 17. Bishop-Harmon tissue forceps 1 x 2 teeth standard
- 18. Castroviejo suturing forceps 1 x 2 teeth with tying platform 0.12mm
- 19. McPherson tying forceps 5mm long smooth jaws for 8-0 to 11-0 sutures, straight
- 20. McPherson tying forceps 5mm long smooth jaws for 8-0 to 11-0 sutures, angled
- 21. Kelman-McPherson forceps angled very delicate, 7.5mm long smooth jaws
- 22. Utrata capsulorhexis forceps very delicate grasping tips & extremely thin 11mm long shanks round handle
- 23. Blaydes lens holding forceps
- 24. Sinskey II lens manipulating hook 0.2mm diam blunt tip angled
- 25. Kuglen iris hook and lens manipulator push-pull model angle d
- 26. Katena needle holder extra delicate jaws curved with lock
- 27. Castroviejo needle holder standard jaws straight without lock
- 28. Morrison lens loop and probe very thin
- 29. Kansas nucleus vectis, solid used as a"cutting block" for Kansas nucleus bisector and trisector for right-handed surgeons
- 30. Castroviejo blade holder
- 31. Air injection cannula, angled 5mm from tip, 27 gauge
- 32. McIntyre anterior chamber cannula smooth blunt tip 26 gauge, angled
- 33. Jensen posterior capsule polisher carbide impregnated on posterior surface of olive tip front opening, gently curved 23 gauge

- 34. Simcoe irrigating-aspirating cannula original model with aspiration thorough tubing hub and irrigation. Luer-lock hub. 23-gauge thin wall, 15mm long curved tubes, with 0.3mm dia. aspirating port facing into curve and slightly shorter irrigating tip with 45 angled front opening
- 35. Gallipot, 6 oz,
- 36. Kidney dish 20.6 x 9.5 x 3.8cm
- 37. Rampley serrated jaws, box joint, straight 25cm
- 38. Culler iris spatula steriling silver blade1mm wide
- 39. Hartmann mosquito forceps100mm long straight
- 40. Graefe hook, small
- 41. Vannas scissors, straight
- 42. Eye scissors, straight and sharp
- 43. Eye scissors, straight and blunt
- 44. Bucher-Kansas trisector
- 45. Tooke knife

#### Appendix 6: Intracapsular Cataract Extraction (ICCE) Set.

- 1. Bishop-Harmon anterior chamber irrigator includes 19 gauge angled cannula, adaptor and blue
- 2. Silicone bulb, complete
- 3. Baby Jones towel clamp cross-action2 1/4" (55mm) long
- 4. Hartmann mosquito forceps100mm long straight
- 5. Barraquer wire speculum large
- 6. Chuck handle #3K round 10cm
- 7. Castroviejo corneoscleral scissors small blades right
- 8. Castroviejo corneoscleral scissors small blades left
- 9. Westcott tenotomy scissors curved blunt tips
- 10. Westcott stitch scissors very sharp pointed tips
- 11. Stern-Gills scissors, extra thin 10mm long angled forwards
- 12. Castroviejo calliper, 20mm spread straight
- 13. Bonaccolto conjunctiva forceps longitudinally serrated jaws with cross serration at tips
- 14. Elschnig forceps
- 15. Harms-Colibri forceps, very delicate1 x 2 teeth, 0.12mm with tying platform
- 16. Step diamond knives B=1.00, L=3.00, D=0.20, A=45°, s=1.00
- 17. Bishop-Harmon tissue forceps 1 x 2 teeth standard
- 18. Castroviejo suturing forceps 1 x 2 teeth with tying platform 0.12mm
- 19. McPherson tying forceps 5mm long smooth jaws for 8-0 to 11-0 sutures, straight
- 20. McPherson tying forceps 5mm long smooth jaws for 8-0 to 11-0 sutures, angled
- 21. Kelman-McPherson forceps angled very delicate, 7.5mm long smooth jaws
- 22. Utrata capsulorhexis forceps very delicate grasping tips & extremely thin 11mm long shanks round handle
- 23. Blaydes lens holding forceps
- 24. Sinskey II lens manipulating hook 0.2mm diam blunt tip angled
- 25. Kuglen iris hook and lens manipulatorpush-pull model angle d
- 26. Katena needle holder extra delicate jaws curved with lock
- 27. Castroviejo needle holder standard jaws straight without lock
- 28. Morrison lens loop and probe very thin

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- 29. Kansas nucleus vectis, solid used as a"cutting block" for Kansas nucleus bisector and trisector for right-handed surgeons
- 30. Castroviejo blade holder
- 31. Air injection cannula, angled 5mm from tip, 27 gauge
- 32. McIntyre anterior chamber cannula smooth blunt tip 26 gauge, angled
- Jensen posterior capsule polisher carbide impregnated on posterior surface of olive tip front opening, gently curved 23 gauge
- 34. Simcoe irrigating-aspirating cannula original model with aspiration thorough tubing hub and irrigation. Luer-lock hub. 23 gauge thin wall, 15mm long curved tubes, with 0.3mm dia. aspirating port facing into curve and slightly shorter irrigating tip with 45 angled front opening
- 35. Katena intrument caddy double level, with removable lid. 325 x 265 x 42mm
- 36. Gallipot, 6 oz,
- 37. Kidney dish 20.6 x 9.5 x 3.8cm
- 38. Rampley serrated jaws, box joint, straight25cm
- 39. Culler iris spatula steriling silver blade1mm wide
- 40. Hartmann mosquito forceps100mm long straight
- 41. Super blade 45° (12/pk)
- 42. Graefe hook, small
- 43. Vannas scissors, straight
- 44. Eye scissors, straight and sharp
- 45. Eye scissors, straight and blunt
- 46. Bucher-Kansas trisector
- 47. Tooke knife

#### Appendix 7: Lid Set

- 1. Tooth forcep
- 2. Lid guard
- 3. Bard parker hande
- 4. Scapel blade No 15
- 5. Needle holder
- 6. Wescott scissor
- 7. Bulldog clamp
- 8. Desmarres
- 9. Skin hook retractor
- 10. Straight scissor
- 11. Steven scissor
- 12. Wright needle (ptosis)

# Appendix 8: Descemet Stripping Automated Endothelial Keratoplasty (DSAEK) Set

- 1. Sterilization box in aluminum
- 2. Adjustable Eye Speculum (open curved blades)
- 3. Straight Eye Scissor
- 4. Caliper
- 5. Rycroft irrigation Cannula
- 6. Bishop-Harmon Irrigating Cannula
- 7. Irrigation Port 0.9-mm
- 8. Price Hook 0.7-mm tip
- 9. Corneal marker (8.0-mm, 8.5-mm, 9.0-mm diameter)
- 10. "S" Marker (for DSAEK)
- 11. Bonn-Moria Forceps (0.18-mm teeth with platforms)
- 12. Busin Forceps (20G, 23G)
- 13. Barraquer-De Laage needle holder, non-locking
- 14. 90° Spatula (for Keratoplasty)
- 15. Busin Glide Spatula
- 16. Tying Forceps Straight
- 17. Tying Forceps Curved
- 18. Barraquer-Troutman Forceps (0.12-mm oblique teeth, "colibri" type)
- 19. Bonn Forceps (0.12-mm teeth)
- 20. Vannas scissors

# Appendix 9: Penetrating Keratoplasty (PK) Set

- 1. Sterilization box in stainless steel
- 2. Adjustable Speculum (open curved blades)
- 3. Straight Eye Scissor
- 4. Katzin Scissor (Clockwise)
- 5. Katzin Scissor (Counter-clockwise)
- 6. Vannas scissors
- 7. Westcott Type Stitch Scissors
- 8. Barraquer-De Laage needle holder, non-locking
- 9. Bishop-Harmon Irrigating Cannula
- 10. Rycroft irrigation Cannula
- 11. Maloney Keratometer
- 12. Lowa P.K. Press Punch
- 13. Teflon Block
- 14. Tying Forceps Straight
- 15. Tying Forceps Curved
- 16. Conjunctiva Forceps
- 17. Tooth Forceps
- 18. Polack Double Corneal Forceps Colibri Style
- 19. Barraquer-Troutman Forceps (0.12-mm oblique teeth, "colibri" type)
- 20. Bonn Forceps (0.12-mm teeth)
- 21. Viscoelastic Injection Cannula
- 22. Schaedel Towel Clamp
- 23. Serrefine



- 24. Blade Holder
- 25. SFO Cannula dual current
- 26. Radial Marker
- 27. Caliper
- 28. Paton Double-Ended Spatula

### Appendix 10: Dacryocystorhinostomy (DCR) Set

- 1. Kerrison rongeur
- 2. Bone rongeur
- 3. Knapp (cat's paw) retractor
- 4. Bowman's probe
- 5. Bone mallet & chisel
- 6. Punctum dilator
- 7. Desmarres
- 8. Freer periosteal elevator
- 9. Suction tube
- 10. Bard parker handle
- 11. Scapel blade No.15
- 12. Needle holder
- 13. Wescott scissor
- 14. Bulldog clamp
- 15. Tooth forceps

## Appendix 11: Orbitotomy Set

- 1. Desmarres
- 2. Bone mallet & chisel
- 3. Orbital retractor
- 4. Freer periosteal elevator
- 5. Stevens mousses scissor
- 6. Skin hook retractor
- 7. Artery forcep
- 8. Suction tube
- 9. Bard parker handle
- 10. Scapel blade No.15
- 11. Needle holder
- 12. Wescott scissor
- 13. Bulldog clamp
- 14. Tooth forcep



#### Appendix 12: Strabismus Set

- 1. Lieberman Speculum large
- 2. Lieberman Speculum small
- 3. Lieberman Infant Speculum
- 4. Hartmann Mosquito Forceps, curved (2)
- 5. Helveston Barbie" Retractor
- 6. Helveston "Big Barbie" Retractor
- 7. Helveston Great Big Barbie" Retractor
- 8. Helveston Teaser Hook, 6mm (3)
- 9. Helveston Finder Hook, large
- 10. Helveston Finder hook, small
- 11. Helveston Muscle hook, 8mm
- 12. Helveston Muscle Hook, 10mm
- 13. Helveston Muscle Hook, 12mm
- 14. Helveston Scleral Ruler
- 15. Castroviejo Callipers, straight
- 16. Westcott Tenotomy Scissors
- 17. Westcott Stitch Scissors
- 18. Bonn Forceps, 0.12mm
- 19. Moody Fixation Forceps, left
- 20. Moody Fixation Forceps. right
- 21. Lester Fixation Forceps, 2x3 (3)
- 22. Helveston Tying Forceps (2)
- 23. Rychwalski Muscle Hook, with grooves
- 24. Castroviejo Needle Holder, straight, w/lock
- 25. Barraquer Needle Holder, curved, w/lock
- 26. Bishop Hamon AC Irrigator
- 27. Sterilizing Case, double. aluminium

#### Appendix 13: Trabeculectomy Set

- 1. Bishop-Harmon A/C Irrigator
- 2. Hartmann Mosquito Forceps, straight
- 3. Eye Speculum, adjustable
- 4. Eye Scissors, straight
- 5. Sarkisian-Westcott Scissors, small blades
- 6. Westcott Tenotomy Scissors
- 7. Vannas Scissors, 7mm, curved
- 8. McPherson-Westcott Stitch Scissors
- 9. Fechtner Conjunctiva Forceps (2)
- 10. Colibri Forceps, 0.12mm teeth
- 11. Bishop-Harmon Forceps
- 12. Castroviejo Caliper, straight
- 13. Kelly's / Khaw Trabeculectomy Punch
- 14. Barraquer Needle Holder, curved
- 15. Micro Tying Scissors
- 16. Sterilizing Case, aluminum



# Appendix 14: Vitrectomy Set

- 1. Fishkind-Castroviejo Speculum
- 2. Halsted Mosquito Forceps, straight (2)
- 3. Eye Scissors, straight
- 4. Bishop-Harmon A/C Irrigator
- 5. Stevens Scissors, straight
- 6. Stevens Scissors, curved
- 7. Westcott Tenotomy Scissors
- 8. Westcott Stitch Scissors
- 9. Graefe Muscle Hook #2
- 10. Gass Retinal Detachment Hook
- 11. Schocket Scleral Depressor
- 12. Castroviejo Caliper, straight
- 13. Watzke Sleeve Spreading Forceps
- 14. Bonaccolto Conjunctiva Forceps
- 15. Nugent Utility Forceps, serrated
- 16. Castroviejo Forceps, 0.12mm
- 17. Castroviejo Forceps, 0.3mm
- 18. Castroviejo Needle Holder, curved, w/lock
- 19. Castroviejo Needle Holder, straight
- 20. McPherson Tying Forceps, straight
- 21. Sterilizing Case, aluminum

# Appendix 15: Evisceration Set / Enucleation Set

- 1. Lester-Burch eye speculum
- 2. Bunge evisceration spoon, large
- 3. Bunge evisceration spoon, small
- 4. Wells Enucleation spoon
- 5. Graefe muscle hook #2
- 6. Stevens Scissors, straight
- 7. Enucleation scissors, strong curve
- 8. Tissue forceps
- 9. Halsted mosquito forceps, curved

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