



ENT IMPERIAL

Delivering Excellence in Surgical Care

## MicroLaryngoscopy Simulation

In this station you will carry out the following tasks:

1. MicroLaryngoscopy and assessment of regional anatomy
2. LEFT excisional biopsy of T<sub>is</sub> lesion
3. RIGHT submucosal flap
4. RIGHT cordectomy
5. Vocal cord medialisation

Please assist each other in these tasks

You will be assessed throughout, please ensure that all forms are filled in

Thank you



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## MICROLARYNGOSCOPY SKILLS LAB

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### Objectives



- In this session you will have the opportunity perform and be assessed on the following procedures:
  - Microlaryngoscopy (EUA)
  - LEFT excisional biopsy of T<sub>is</sub> vocal cord lesion
  - RIGHT submucosal flap
  - RIGHT cordectomy
  - Vocal cord medialisation

## Before starting



- Adjust the eyepiece height and interpupillary distance to your need.
- The specimen has been placed in the position to give you best view and focus.
- Ensure the camera sees what you are doing all the time as the assessment is done on video.
- There will also be direct supervision and assessment, so make sure all faculty members are watching what you are doing.
- Enter your name onto the Storz screen and start recording.

## 1. Microlaryngoscopy



With the closed curved forceps point to the following structures in this EXACT order:

- **Supraglottis**
  - Epiglottis
  - Ary-epiglottic fold
  - Right then left arytenoids
  - Right then Left false cords
- **Glottis**
  - Anterior commissure
  - Right then left vocal folds.
  - Check for laryngeal cleft
- **Subglottis**
- **Assess the mobility on the right then the left**



## 2. Excisional biopsy of T<sub>is</sub> vocal cord lesion



- Identify the mucosal lesion marked
- Perform excisional biopsy of mucosa only
- Aim for 1mm margin using appropriate instruments
- Place excised lesion on small paper for histology and show on camera



## 3. Submucosal flap



- Elevate a lateral cordotomy mucosal flap from the true cord.
- Expose the medial free edge of the vocal ligament without damaging the mucosal flap.
- Reposition the intact mucosal flap and swipe the mucosa surface to confirm integrity.



#### 4. Cordectomy



- Perform a lateral incision between where the vocal process would be and arytenoid.
- Include the false and true cords all the way down to subglottis.
- The result should be a wedge defect.



#### 5. Vocal cord medialisation



- Fill the Radiesse syringe with 1ml filler.
- Show the syringe volume scale on camera.
- Insert needle up to the indicator (should be visible)
- Apply 2 injections just lateral to the arcuate line (posterior and middle)
- Avoid over injecting or spillage.
- Watch subglottic area for fullness.
- Show on screen how much filler is left in syringe.



## Debrief and feedback



- At the end of the session you will receive personalised feedback regarding your performance.
- You will also be asked to complete a feedback form assessing face and content validity of the simulation.

## Task Specific assessment – M/L

Trainee:		Assessor:			
Microlaryngoscopy EUA	a) Epiglottis	N	D	S	
	b) Aryepiglottic folds	N	D	S	
	c) Right then left arytenoids	N	D	S	
	d) Right then left false cords	N	D	S	
	e) Anterior commissure	N	D	S	
	f) Right then left vocal folds	N	D	S	
	g) Checks for laryngeal cleft	N	D	S	
	h) Subglottis	N	D	S	
	i) Assess the mobility of the right then the left	N	D	S	
LEFT Excisional biopsy of vocal cord T <sub>is</sub>	a) Identifies the marked mucosal lesion	N	D	S	
	b) Performs excisional biopsy of mucosa only	N	D	S	
	c) Resects with 1mm margin using appropriate instruments	N	D	S	
	d) Places excised lesion on small paper for histology	N	D	S	
RIGHT sub-mucosal flap	a) Elevates a lateral cordotomy mucosal flap of the true cord	N	D	S	
	b) Exposes the medial free edge of the vocal ligament without damaging the mucosal flap	N	D	S	
	c) Repositions intact mucosal flap and swipes the mucosal surface to confirm integrity	N	D	S	
RIGHT cordectomy	a) Performs a lateral incision between where vocal process would be and the arytenoid	N	D	S	
	b) Includes the false and true cords down to see subglottis	N	D	S	
	Achieves wedge defect	N	D	S	

## Task Specific assessment –

Trainee:		Assessor:			
Vocal cord medialisation	a) Inserts needle up to the indicator (indicator should be visible)	N	D	S	
	b) Applies 2 injections just lateral to the arcuate line (posterior or middle)	N	D	S	
	c) Avoids over injecting or spillage	N	D	S	
	d) Injects adequately to achieve subglottic fullness	N	D	S	
	Injects 0.3-0.6ml of filler	N	D	S	

Comments



## Global Assessment – Microlaryngoscopy

Trainee:					Assessor:						
G1 Follows an agreed, logical sequence or protocol for the procedure							N	D	S		
1	2	3	4	5							
G2 Consistently handles tissue well with minimal damage							N	D	S		
1	2	3	4	5							
G5 Uses instruments appropriately and safely							N	D	S		
1	2	3	4	5							
G6 Proceeds at appropriate pace with economy of movements							N	D	S		
1	2	3	4	5							
G9 Uses assistant(s) to the best advantage at all times							N	D	S		
1	2	3	4	5							
G10 Communicates clearly and consistently with the scrub team or nurses							N	D	S		
1	2	3	4	5							
G11 Communicates clearly and consistently with the anaesthetist							N	D	S		
1	2	3	4	5							
Overall performance and outcome							0	1	2	3	4

## Face and content validity – M/L Simulation

Name:	Grade:					
State the level of agreement with the following statements:	strongly disagree	disagree	undecided	agree	strongly agree	
Face						
Appearance of anatomical structures is realistic	1	2	3	4	5	
Tissue feel is realistic	1	2	3	4	5	
Depth perception is realistic	1	2	3	4	5	
Instrument application is realistic	1	2	3	4	5	
Content						
This model is useful for teaching anatomy	1	2	3	4	5	
This model is useful for teaching surgical planning	1	2	3	4	5	
This model is useful for improving operative technique	1	2	3	4	5	
This model is useful for improving hand-eye coordination	1	2	3	4	5	
This model is useful for improving manual dexterity	1	2	3	5	5	
This model is useful for improving tissue handling	1	2	3	4	5	
This model is useful as an overall training tool	1	2	3	4	5	
Task						
This model is useful for teaching microlaryngoscopy (EUA)	1	2	3	4	5	
This model is useful for teaching excision of VC lesion	1	2	3	4	5	
This model is useful for teaching sub-mucosal flap	1	2	3	4	5	
This model is useful for teaching cordotomy	1	2	3	4	5	
This model is useful for teaching VC medialization	1	2	3	4	5	
Curriculum						
Skills I learned are transferable to the operating theatre	1	2	3	4	5	
This model should be incorporated into training curriculum	1	2	3	4	5	
I would recommend this model to trainees	1	2	3	4	5	