

Syllabus	
Topic	Rigid bronchoscopy

A 65year old patient requires a rigid bronchoscopy for biopsy and possible laser resection of an endobronchial tumour

a)
List 3 indications for rigid bronchoscopy, other than tumour resection (3 marks)

- 1)
- 2)
- 3)

b)
Give 2 methods available for the maintenance of anaesthesia during a rigid bronchoscopy (2 marks)

- 1)
- 2)

c)
Give 4 methods available for the maintenance of gas exchange during a rigid bronchoscopy (4 marks)

- 1)
- 2)
- 3)
- 4)

d)
List 3 possible surgical complications of rigid bronchoscopy (3 marks)

- 1)
- 2)
- 3)

e)

List 4 possible anaesthetic complications of rigid bronchoscopy (4 marks)

- 1)
- 2)
- 3)
- 4)

f)

List 4 safety considerations and measures that are required if a laser was to be used (4 marks)

- 1)
- 2)
- 3)
- 4)

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	Answer	Mark	Guidance
a)	<u>Diagnostic:</u> <ul style="list-style-type: none"> • Massive haemoptysis • Tumour biopsy <u>Therapeutic:</u> <ul style="list-style-type: none"> • Massive haemoptysis • Biopsy tumour • Stent insertion • Tracheal dilation • Removal inhaled FB • Tumour debulking 	1 mark for each (Max. 3 marks)	
b)	<ul style="list-style-type: none"> • Volatile : Intermitted or continuous – Not with Jet ventilation • Intermittent IV bolus • TCI/TIVA • Local topicalization only 	1 mark for each (Max. 2 marks)	
c)	<ul style="list-style-type: none"> • Spontaneous assisted ventilation • Intermittent ventilation with or without oxygen insufflation via side port. • Controlled ventilation via a side port of ventilating bronchoscope • Manual low frequency jet ventilation (eg Sanders manual jet ventilation) • Automated High frequency jet ventilation • Apnoeic oxygenation 	1 mark for each (Max. 4 marks)	
d)	<u>Bronchoscopy/surgery related:</u> <ul style="list-style-type: none"> • Airway bleeding/haemorrhage • Soft tissue trauma -lips, tongue, vocal cords, trachea, bronchi • Dental damage • Pneumothorax (due to resection or biopsy) • Cervical spine damage • Airway oedema 	1 mark for each (Max. 3 marks)	

e)	<p><u>Anaesthesia related:</u></p> <ul style="list-style-type: none"> • Hypoxaemia, • Hypercarbia • Barotrauma associated with jet ventilation: <ul style="list-style-type: none"> ○ Pneumothorax, ○ Pneumomediastinum ○ Pneumopericardium ○ Subcutaneous emphysema • Awareness • Larynospasm, bronchospasm • Gastric distension • Impaired venous return /cardiovascular disturbances • Aspiration/Airway contamination 	1 mark for each (Max. 4 marks)	
f)	<p>Patient Safety:</p> <ul style="list-style-type: none"> • Maintain inspired oxygen as low as possible • Saline soaked gauze over mouth/teeth • Airway equipment being laser compatible <p>General theatre safety:</p> <ul style="list-style-type: none"> • Goggles for staff • Signage of doors • Locked theatre doors • Presence of laser trained staff member <p>Readiness for airway fire:</p> <ul style="list-style-type: none"> • Alertness • Syringe of saline ready for flooding airway • Airway equipment ready and available 	1 mark for each (Max. 4 marks)	

References

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