

Syllabus	CT_IK_18, CT_IK_19, CT_IK_24
Topic	Endoscopic thoracic sympathectomy

**a)**

List 4 indications for an endoscopic thoracic sympathectomy (ETS) procedure (4 marks)

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

**b)**

List 3 anaesthetic techniques to manage the airway for this procedure, listing an advantage and disadvantage for each. (9 marks)

- 1) Anaesthetic technique: .....  
    Advantage: .....  
    Disadvantage: .....
- 2) Anaesthetic technique: .....  
    Advantage: .....  
    Disadvantage: .....
- 3) Anaesthetic technique: .....  
    Advantage: .....  
    Disadvantage: .....

**c)**

List 4 complications that can occur intraoperatively in this procedure? (4 marks)

1) .....

2) .....

3) .....

4) .....

**d)**

List 3 postoperative complications that may occur following ETS? (3 marks)

1) .....

2) .....

3) .....

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	Answer	Mark	Guidance
a)	<ul style="list-style-type: none"> <li>• Palmar, axillary or craniofacial hyperhidrosis</li> <li>• Chronic regional pain syndromes</li> <li>• Facial blushing</li> <li>• Chronic angina pectoris (rare)</li> <li>• Congenital long QT syndromes</li> </ul>	1 mark for each (Max. 4 marks)	Only one for this mark
b)	<p><b><u>Single lumen ETT intubation with intrathoracic insufflation</u></b></p> <ul style="list-style-type: none"> <li>• <b>Adv:</b> Familiar, avoids hazards of OLV</li> <li>• <b>Dis:</b> Surgical access and lung deflation may be suboptimal compared to OLV techniques</li> </ul> <p><b><u>Single lumen ETT intubation with bronchial blocker with/without intrathoracic insufflation</u></b></p> <ul style="list-style-type: none"> <li>• <b>Adv:</b> Familiar placement, bronchial blocker good lung isolation</li> <li>• <b>Dis:</b> Takes longer for lung deflation vs ETT, bronchial blocker placement requires further expertise, easier for malposition versus DLT</li> </ul> <p><b><u>Double lumen ETT with/without intrathoracic insufflation</u></b></p> <ul style="list-style-type: none"> <li>• <b>Adv:</b> Better lung isolation</li> <li>• <b>Dis:</b> Dangers of OLV</li> </ul> <p><b><u>Laryngeal mask airway with/without intrathoracic insufflation</u></b></p> <ul style="list-style-type: none"> <li>• <b>Adv:</b> Ease of placement</li> <li>• <b>Dis:</b> Increased risk aspiration, gastric insufflation (reduced by used of NGT)</li> </ul>	1 mark for each technique and 1 mark for an advantage and disadvantage for each (Max. 9 marks for the question)	Any example of hazards of OLV can be accepted

c)	<p><b><u>Airway</u></b></p> <ul style="list-style-type: none"> <li>• Malposition of DLT or bronchial blocker</li> </ul> <p><b><u>Respiratory</u></b></p> <ul style="list-style-type: none"> <li>• Hypoxia (Secondary to shunt caused by OLV)</li> </ul> <p><b><u>Cardiovascular</u></b></p> <ul style="list-style-type: none"> <li>• Hypotension (Secondary to capnothorax)</li> <li>• Cardiac arrhythmia (due to intrathoracic diathermy)</li> <li>• Bleeding (rare)</li> </ul>	1 mark for each (Max. 4 marks)	
d)	<ul style="list-style-type: none"> <li>• Compensatory sweating</li> <li>• Gustatory sweating</li> <li>• Persistent pneumothorax</li> <li>• Ongoing hypoxia (2ry to pneumothorax, atelectasis)</li> <li>• Chest pain</li> <li>• Risk of acute lung injury if protective OLV not used.</li> <li>• Subcutaneous emphysema</li> <li>• Transient pleural effusion</li> </ul>	1 mark for each (Max. 3 marks)	

**References**

1) Martin A, Telford R. Anaesthesia for endoscopic thoracic sympathectomy. CEACCP (2009) 9(2)52–55 <https://academic.oup.com/bjaed/article/9/2/52/299493>