

Syllabus	AM_IK_01
Topic	Awake fiberoptic endotracheal intubation

A 55 year old male presents for an elective thyroidectomy. After pre-assessment he is deemed to have a predicted difficult intubation and be difficult to bag mask ventilate. You elect to perform an awake fiberoptic intubation (AFOI).

a)

List 4 predictors of difficult bag mask ventilation (4 marks)

1.
2.
3.
4.

b)

What is the maximal described dose of lignocaine for topicalisation of the airway for lean body weight (LBW)? (1 mark)

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c)

Give 4 recommendations of the Difficult Airway Society (DAS) for awake fiberoptic intubation (4 marks)

1.
2.
3.
4.

d)

What 2 methods should be used to confirm tracheal tube placement prior to induction of anaesthesia? (2 marks)

1.
2.

e)

Give an example of a sedation strategy that is safe for the provision of an awake fibrotic intubation (1 mark)

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f)

List **EIGHT** possible complications associated with awake fiberoptic intubation (8 marks)

1.

2.

3.

4.

5.

6.

7.

8.

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	Answer	Mark	Guidance
a)	<ul style="list-style-type: none"> • Previous difficult mask ventilation • Obesity • Edentulous • Age >55 yr • Beards • Obstructive sleep apnoea/snoring 	1 mark for each (Max 4 marks)	
b)	<ul style="list-style-type: none"> • 9mg/kg 	1 mark	
c)	<ul style="list-style-type: none"> • AFOI must be considered in presence of predictors of a difficult airway • A cognitive aid e.g. a checklist is recommended before and during performance of AFOI • Supplemental oxygen should always be administered during AFOI • Effective topicalisation must be established & tested. The max. dose of lidocaine should not exceed 9 mg/kg lean body weight. • Cautious use of minimal sedation can be beneficial - ideally administered by an independent practitioner. Sedation should not be used as a substitute for inadequate airway topicalisation. • Number of attempts should be limited to 3, with one further attempt by a more experienced operator (3 + 1). • Anaesthesia should only be induced after a two-point check (visual confirmation & capnography) confirms correct tracheal tube position. • All departments should support anaesthetists to attain competency & maintain skills in AFOI 	1 mark for each (Max. 4 marks)	
d)	<ul style="list-style-type: none"> • Visualisation of the tracheal lumen with flexible bronchoscope. • Visualisation of the tracheal tube through the vocal cords with direct or video laryngoscope. • Capnography 	1 mark for each (Max. 2 marks)	

e)	<ul style="list-style-type: none"> • Midazolam bolus • Remifentanil TCI - approx CET 3-5ng/ml • Propofol TCI - approx CET 1mcg/ml • Dexmedetomidine 	1 mark for any point	
f)	<p><u>Complications associated with sedation:</u></p> <ul style="list-style-type: none"> • Oversedation - obtunded airway reflexes • Undersedation/Agitation • Vomiting/Aspiration <p><u>Complications associated with topicalisation:</u></p> <ul style="list-style-type: none"> • Local anaesthetic toxicity • Pain/coughing/gagging <p><u>Complications associated with oxygenation:</u></p> <ul style="list-style-type: none"> • Hypoventilation • Hypoxia • Airway obstruction <p><u>Complications related to performance of fiberoptic intubation:</u></p> <ul style="list-style-type: none"> • Failure • Airway trauma • Airway swelling • Bleeding • Uncontrolled secretions • Cuff leak • Accidental extubation • Incorrect tube placement 	1 mark for each (Max. 8 marks)	

References

- 1) Ahmad I, El-Boghdadly K, Bhagrath R *et al.* Difficult Airway Society guidelines for awake tracheal intubation (ATI) in adults. *Anaesthesia* (2020) 75(4)509-528
<https://doi.org/10.1111/anae.14904>
- 2) Leslie D, Stacey M. Awake intubation. *CEACCP* (2015) 15(2),64–67
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