

Syllabus	
Topic	Obstetric difficult airway

**a)**

You are the labour ward anaesthetist and are required to give a general anaesthetic for an emergency Caesarean Section. Following a rapid sequence induction, you fail to intubate the woman after 3 attempts. List 8 factors that you would take into consideration when deciding whether it is essential / safe enough to proceed with surgery immediately. (8 marks)

1. ....
2. ....
3. ....
4. ....
5. ....
6. ....
7. ....
8. ....

**b)**

You decide to continue with surgery after the failed intubation using a second-generation supraglottic airway device. List 4 steps that you could take to minimise the risk of aspiration? (4 marks)

1. ....
2. ....
3. ....
4. ....

**c)**

Shortly after knife to skin, you find that you now can't ventilate or oxygenate the woman. What steps should be taken prior to performing front of neck access? (4 marks)

1. ....
2. ....
3. ....
4. ....

**d)**

What were the recommendations from NAP 4 (National Audit Project 4 – major complications of airway management in the UK) regarding management of the airway in the pregnant woman? (4 marks)

1. ....
2. ....
3. ....
4. ....

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Q	Answer	Mark	Guidance
a)	<p><u>Factors considered before Induction</u></p> <ul style="list-style-type: none"> <li>• <b>Maternal Condition:</b> <ul style="list-style-type: none"> <li>○ Haemorrhage</li> <li>○ Cardiac / respiratory compromise</li> <li>○ Cardiac arrest</li> </ul> </li> <li>• <b>Fetal condition:</b> <ul style="list-style-type: none"> <li>○ Abnormal fetal heart rate despite intrauterine resuscitation with PH&lt;7.15</li> <li>○ Sustained bradycardia</li> <li>○ Fetal haemorrhage</li> <li>○ Suspected uterine rupture.</li> </ul> </li> <li>• <b>Anaesthetist:</b> <ul style="list-style-type: none"> <li>○ Experienced trainee or consultant</li> </ul> </li> <li>• <b>Obesity:</b> <ul style="list-style-type: none"> <li>○ Normal BMI</li> </ul> </li> <li>• <b>Surgical Factors:</b> <ul style="list-style-type: none"> <li>○ No risk factors / straight forward surgery</li> <li>○ Single uterine scar</li> </ul> </li> <li>• <b>Aspiration risk:</b> <ul style="list-style-type: none"> <li>○ Fasted</li> <li>○ Not in labour</li> <li>○ Antacids given</li> </ul> </li> <li>• <b>Alternative anaesthesia:</b> <ul style="list-style-type: none"> <li>○ Contraindicated</li> <li>○ Surgery started.</li> </ul> </li> </ul> <p><u>Factors considered after failed intubation</u></p> <ul style="list-style-type: none"> <li>• <b>Airway device:</b> <ul style="list-style-type: none"> <li>○ 2<sup>nd</sup> gen SGA</li> </ul> </li> <li>• <b>Airway hazards:</b> <ul style="list-style-type: none"> <li>○ None (e.g. no bleeding / oedema / secretions / stridor)</li> </ul> </li> </ul>	<p>1 mark for each point (Max. 8 marks)</p>	<p>Accept fetal acidosis.</p> <p>Accept experienced surgeon.</p> <p>Accept SGA / lgel in-situ.</p>

b)	<ul style="list-style-type: none"> <li>• Maintain cricoid pressure until delivery (if not impeding ventilation)</li> <li>• After delivery maintain vigilance and reapply cricoids pressure if signs of regurgitation</li> <li>• Empty stomach with gastric drain tube if using 2<sup>nd</sup> generation supraglottic airway device</li> <li>• Ask surgeon to minimise fundal pressure</li> <li>• Administer H<sub>2</sub> receptor blocker IV if not already given. e.g. ranitidine</li> </ul>	<p style="text-align: center;">1 mark for each point (Max. 4 marks)</p>	<p style="text-align: center;">Accept NG tube.</p>
c)	<ul style="list-style-type: none"> <li>• Declare an emergency to theatre team</li> <li>• Call for additional help – ITU /ENT/senior</li> <li>• Give 100% O<sub>2</sub></li> <li>• Exclude laryngospasm – ensure neuromuscular blockade</li> <li>• Position the patient for front of neck access – extend neck</li> </ul>	<p style="text-align: center;">1 mark for each point (Max. 4 marks)</p>	
d)	<ul style="list-style-type: none"> <li>• Obstetric anaesthetists need to maintain their airway skills including strategies to manage difficult intubation, failed intubation and CICV</li> <li>• Obstetric anaesthetists should be familiar and skilled with supra-glottic airway devices for rescuing the airway: particularly those designed to protect from aspiration and to facilitate ventilation and/or intubation</li> <li>• Anaesthetic departments should provide a service where the skills and equipment are available to deliver awake fiberoptic intubation whenever indicated</li> <li>• All staff working in recovery area of a delivery suite must be competency trained and regularly updated</li> </ul>	<p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p> <p style="text-align: center;">1</p>	

## References:

- 1) Difficult Airway Society: Guidelines for the management of difficult and failed intubation in obstetrics (2015) [https://das.uk.com/guidelines/obstetric\\_airway\\_guidelines\\_2015](https://das.uk.com/guidelines/obstetric_airway_guidelines_2015)
- 2) 4<sup>th</sup> National Audit Project of The Royal College of Anaesthetists and The Difficult Airway Society – Major complications of airway management in the UK – Full Report (2011). <https://www.nationalauditprojects.org.uk/downloads/NAP4%20Full%20Report.pdf> (page 185)
- 3) Rucklidge M. Difficult and failed intubations in obstetrics. CEACCP (2012) 12(2)86-91 <https://academic.oup.com/bjaed/article/12/2/86/251341>