

DIFFICULT OBSTETRIC INTUBATION

MODULE: AIRWAY/OBSTETRIC

TARGET: ANAESTHETIC CORE TRAINEES & ALL ANAESTHETISTS

BACKGROUND:

There is an increased incidence of difficult airways in the obstetric population and experience of obstetric general anaesthesia is decreasing. No nationally agreed guidelines exist for this life-threatening emergency and so the anaesthetist must apply local policies where they exist, or a logical, structured approach to this crisis.

RELEVANT AREAS OF THE ANAESTHETIC CURRICULUM

OB_BS_01	Undertakes satisfactory preoperative assessment of the pregnant patient
OB_BS_02	Demonstrates the ability to clearly explain and prepare an obstetric patient for surgery
OB_BS_03	Demonstrates the use of techniques to avoid aorto-caval compression
OB_BS_07	Demonstrates the ability to provide general anaesthesia for caesarean section [S]
AM_BS_09	Demonstrates failed intubation drill [Cross reference; induction of GA]
AM_BS_10	Demonstrates management of “Can’t intubate, Can’t ventilate” scenario [Crossreference; critical incidents]
AM_BS_14	Demonstrates small and large bore needle cricothyroidotomy and manual jet ventilation
AM_BS_15	Demonstrates surgical cricothyroidotomy
CI_BK_14	Failed intubation
CI_BK_15	“Can’t Intubate, Can’t Ventilate”
CI_BK_31	Awareness of human factors concepts and terminology and the importance of non-technical skills in achieving consistently high performance such as: effective communication, team- working, leadership, decision-making and maintenance of high situation awareness
CI_BK_33	Acceptance that it can happens to you; the unexpected can happen to anyone
CI_BK_34	To practice response protocols in resuscitation room or in simulation with other healthcare professionals as appropriate
CI_BS_01	Demonstrates good non-technical skills such as: [effective communication, team-working, leadership, decision-making and maintenance of high situation awareness]
CI_BS_02	Demonstrates the ability to recognise early a deteriorating situation by careful monitoring
CI_BS_03	Demonstrates the ability to respond appropriately to each incident listed above
CI_BS_04	Shows how to initiate management of each incident listed above
CI_BS_05	Demonstrates ability to recognise when a crisis is occurring
CI_BS_06	Demonstrates how to obtain the attention of others and obtain appropriate help when a crisis is occurring
OB_BS_12	Demonstrates the ability to provide advanced life support for a pregnant patient [S]
CI_IS_01	Demonstrates leadership in resuscitation room/simulation room when practicing response protocols with other healthcare professionals
CI_IS_02	Demonstrates appropriate use of team resources when practicing response protocols with other healthcare professionals
5.3	Performs difficult and failed airway management according to local protocols
EN_HS_06 RC_HS_01	Demonstrates the ability to perform surgical airway techniques [S] [Cross ref. Critical incidents’ cardio-respiratory arrest]
OB_HS_06	Demonstrates skills in managing emergencies including pre-eclampsia, eclampsia, major haemorrhage.

INFORMATION FOR FACULTY

LEARNING OBJECTIVES:

- All anaesthetists should have a strategy for managing failed intubation in the obstetric population
- Oxygen and ventilation are the main priority after failed intubation

SCENE INFORMATION:

- Location: Theatre (Maternity)

EQUIPMENT & CONSUMABLES

- Pregnant female manikin, legs spread and bent at hips and knees. Lower half with drape on. Urinary catheter in situ.
- Neonatal manikin
- Wedge
- Checked anaesthetic machine & Stocked airway trolley
- Difficult airway equipment (according to local usage)
 - ILMA, LMA Supremes, iGels
 - 'Plan D' Equipment:
 - Scalpel and #6ETT
 - Ravussin needle and Manujet
- Self-Inflating bag-valve-mask
- CTG Monitor (Optional)
- Theatre Drapes (Optional)

PERSONS REQUIRED

Anaesthetic Novice
Anaesthetic Assistant
Anaesthetic Senior Trainee/Consultant
Midwife (Optional)
Obstetrician (Optional)

PARTICIPANT BRIEFING: (TO BE READ ALOUD TO PARTICIPANT)

You are the ward anaesthetist. You have been fast bleeped to maternity theatre

FACULTY BRIEFING:

This scenario is for an emergency Caesarean section for cord prolapse requiring general anaesthesia. The airway is unexpectedly difficult, and the trainee is expected to display a systematic approach for managing the situation. The initial introduction can be given by the midwife, or as a history directly taken from the mother (manikin).

'VOICE OF MANIKIN' BRIEFING:

Panicked labouring mother, understands the need to be anaesthetised, concerned about her baby.

You are Sarah, a 28 year old woman, in your first pregnancy. The obstetrician has explained that the cord is trapped between the baby and the cervix and so is not receiving adequate blood supply. The pregnancy has been normal. You have no medical problems, take no medicines and have not had any operations before. You have no allergies.

OTHER IN-SCENARIO PERSONNEL BRIEFING:

ODP:

- Appropriately support the anaesthetist.

Midwife:

- Actions: Hand under drape simulating manual pressure elevation of the presenting part. Monitor CTG and reassure mother until anaesthesia induced.

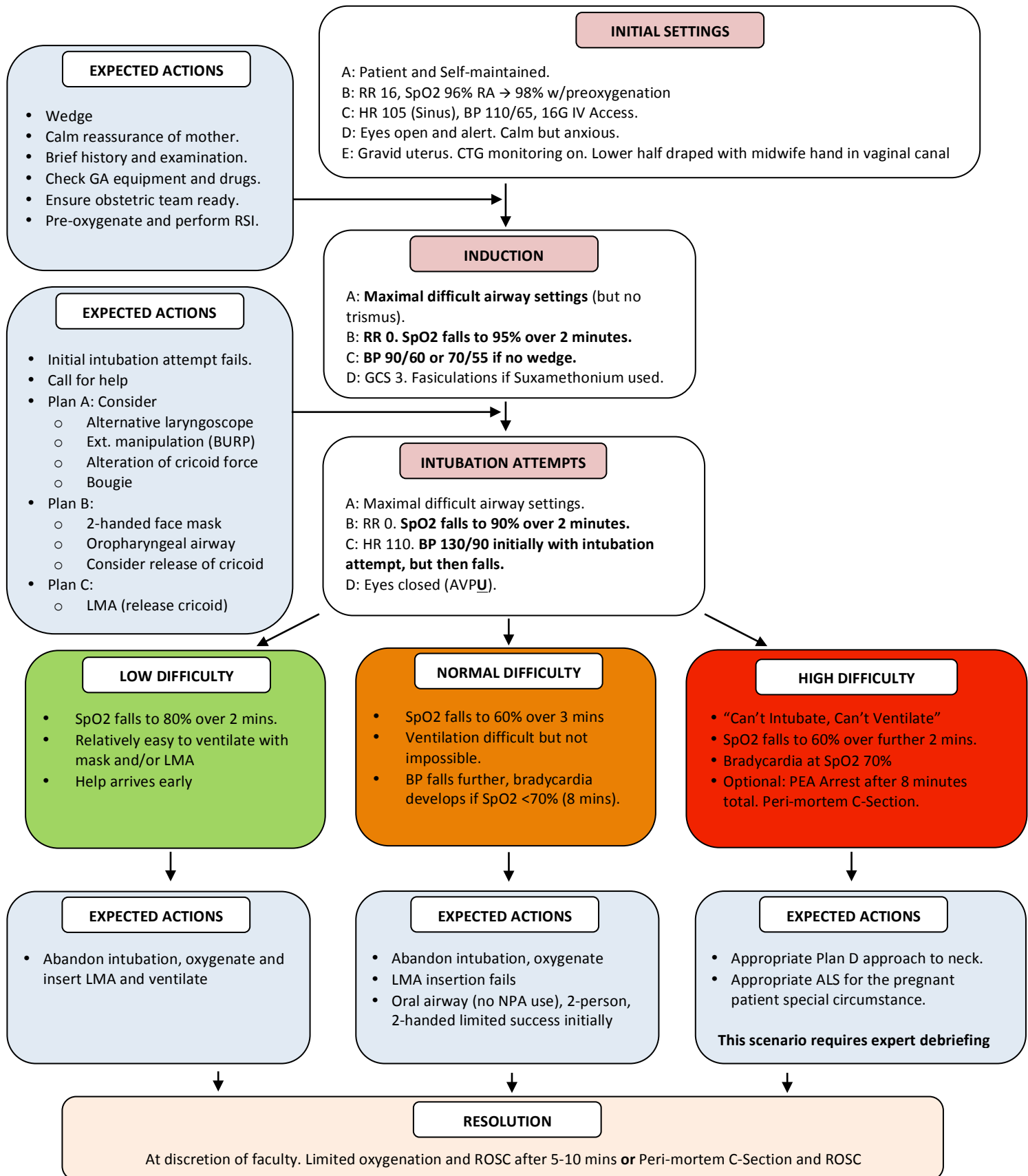
Obstetrician:

- Actions: Anxious to deliver baby as soon as possible. Put pressure on the anaesthetist to hurry up, especially if there seems to be a delay to inducing anaesthesia.

Handover to anaesthetist:

- Can be given by midwife or obstetrician (To be read out)
- Sarah has presented with spontaneous rupture of membranes. The cord was felt in the vaginal canal on the initial VE. We brought her straight to theatre, her CTG shows a poor trace. We've got IV access and sent some bloods, and needs a Category 1 Caesarean Section as soon as possible. We have just catheterised her.

CONDUCT OF SCENARIO



DEBRIEFING

POINTS FOR FURTHER DISCUSSION:

Technical:

- Airway difficulties in obstetric patients
- Strategies to minimise risk in obstetric patients
- Local obstetric difficulty airway protocol
- Advanced life support and resuscitation in the obstetric patient (if performed)
- Procedural techniques (if performed)
 - Cannula Cricothyroidotomy
 - Manujet/Sanders/Jet ventilation
 - Surgical Cricothyroidotomy

Non-technical:

- Situation awareness
- Leadership
- Communication and handover during crises
- Team interactions

DEBRIEFING RESOURCES

1. Anaesthesia for Caesarean section Pt 3 – General Anaesthesia (97). Tutorial of the Week (June 2008) Brown J
<http://totw.anaesthesiologists.org/wp-content/uploads/2009/11/97-Anaesthesia-for-LSCS-part-3-general-anaesthesia.pdf>
2. Difficult and failed intubation in obstetrics. Contin Educ Anaesth Crit Care Pain (Feb 2012) Rucklidge, Hinton
<http://ceaccp.oxfordjournals.org/content/early/2012/02/09/bjaceaccp.mkr060.full?sid=d87d436b-5657-4e8b-8350-db18e5ec51a2>
3. Saving Mother's Lives: Reviewing maternal death to make motherhood safer: 2006-2008. (Mar 2011) British Journal of Obstetrics and Gynaecology. Volume 118, Issue Supplement s1, p1-203. Chapter 8: Anaesthesia. p104-110 <http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0528.2010.02847.x/pdf>

INFORMATION FOR PARTICIPANTS

KEY POINTS:

- Oxygenation and ventilation are the main priority after failed intubation
- All anaesthetists should have a strategy for managing failed intubation in the obstetric population – know your local protocols.

RELEVANCE TO AREAS OF THE ANAESTHETIC CURRICULUM

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WORKPLACE-BASED ASSESSMENTS

Initial Assessment of Competency Certificate	
OB_BTC_A03	Basic competencies for Obstetric Anaesthesia – conduct GA for C-Section [12-24 months] [S]

Basic Level WBPA's	
CIB_D01	Demonstrates the management of the following specific conditions in simulation <ul style="list-style-type: none">Failed intubation Demonstrates the emergency management of the following critical incidents in simulation: <ul style="list-style-type: none">Cardiac and/or respiratory arrest
OBI_C04	Discuss the likelihood of failed intubation and the impact of this possibility on the conduct of anaesthesia.

FURTHER RESOURCES

1. Anaesthesia for Caesarean section Pt 3 – General Anaesthesia (97). Tutorial of the Week (June 2008) Brown J <http://totw.anaesthesiologists.org/wp-content/uploads/2009/11/97-Anaesthesia-for-LSCS-part-3-general-anaesthesia.pdf>
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PARTICIPANT REFLECTION:

What have you learnt from this experience? (Please try to list 3 things)

How will your practice now change?

What other actions will you now take to meet any identified learning needs?

PARTICIPANT FEEDBACK

Date of training session:.....

Profession and grade:.....

What role(s) did you play in the scenario? (Please tick)

Primary/Initial Participant	<input type="checkbox"/>
Secondary Participant (e.g. 'Call for Help' responder)	<input type="checkbox"/>
Other health care professional (e.g. nurse/ODP)	<input type="checkbox"/>
Other role (please specify):	<input type="checkbox"/>
Observer	<input type="checkbox"/>

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I found this scenario useful					
I understand more about the scenario subject					
I have more confidence to deal with this scenario					
The material covered was relevant to me					

Please write down one thing you have learned today, and that you will use in your clinical practice.

How could this scenario be improved for future participants?
 (This is especially important if you have ticked anything in the disagree/strongly disagree box)

FACULTY DEBRIEF – TO BE COMPLETED BY FACULTY TEAM

What went particularly well during this scenario?

What did not go well, or as well as planned?

Why didn't it go well?

How could the scenario be improved for future participants?