Maternity Education Program

Uterine Rupture

Facilitator Resource Kit

CSDS
Clinical Skills Development Service
Queensland Government

Maternity Education Program (MEP)

The resources developed for MEP are designed for use in any Queensland Health facility that care for patients/women who are pregnant/birthing or postnatal. Each resource can be modified by the facilitator and scaled to the needs of the learner as well as the environment in which the education is being delivered, from tertiary to rural and remote facilities.

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Uterine Rupture – Facilitator Resource Kit

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Who is this resource kit for?

This resource kit provides healthcare workers with knowledge and skills on assessing and managing a uterine rupture.

Target audience

Midwifery and medical staff providing maternity care

Duration

45 mins – including simulation and debrief (15 mins for set up not included)

Group size

Suited to small groups (6 – 8)

Learning objectives

By the end of the session the learner should be able to:

- Identify the risk factors associated with a uterine rupture.
- Identify early the signs of uterine rupture.
- Recognise and respond to a clinically deteriorating patient with a uterine rupture.
- Implement emergency management of uterine rupture.

Facilitation guide

1. Provide Participant Resource Kit to the learner.
2. Utilise 2D pictures to demonstrate uterine rupture.
3. Utilise a PowerPoint presentation to assist learners prior to session.
4. Allow learner to apply actions in a simulated uterine rupture case.
5. Conduct group debrief following simulation.

Supporting documents

1. Participant Resource Kit
2. 2D pictures
3. List of further readings
4. Uterine rupture simulation

Overview

Uterine rupture in pregnancy is a rare and often catastrophic complication with a high incidence of fetal and maternal morbidity. Numerous factors are known to increase the risk of uterine rupture, but even in high-risk subgroups, the overall incidence of uterine rupture is low[1].

Uterine rupture in an unscarred uterus is extremely rare with incidence rates estimated at 0.5-2.0% per 10,000 deliveries, and occurrence mainly confined to multiparous patients in labour. Other risk factors for uterine rupture in an unscarred uterus include exposure to uterotonic drugs, uterine anomalies, advancing maternal age, dystocia, macrosomia, multiple gestation and abnormal placentation (placenta accreta, increta, or percreta)[2].

The incidence of scar rupture in a patient undergoing Vaginal Birth After Caesarean (VBAC) has been reported between 22 and 74 per 10,000 births[3].

The initial signs and symptoms of uterine rupture are typically nonspecific, which makes the diagnosis difficult and sometimes delays definitive treatment. The most common sign of a uterine rupture is a prolonged and persistent fetal bradycardia. The classic collection of symptoms of a uterine rupture are abdominal pain (constant or between contractions), vaginal bleeding and fetal heart rate abnormalities.

Other non-specific signs and symptoms of a uterine rupture include acute onset of scar tenderness, abnormal progress in labour, prolonged first or second stage of labour, cessation of previously efficient uterine contractions, haematuria, loss of station of the presenting part, chest pain or shoulder tip pain, maternal tachycardia, hypotension or shock[2].

The time of diagnosis to delivery is critical for both the mother and the fetus. The most significant maternal risk is death, though this is rare. An additional risk is that of a peripartum hysterectomy with rates ranging from 0.5 -2 per 1000[3]. From the time of diagnosis to delivery, generally only 10-37 minutes are available before clinically significant fetal morbidity becomes inevitable. The most significant fetal complication is the risk of perinatal death, which has a reported risk of 0.4-0.7 per 1000[3].

Further readings and resources

Vaginal birth after caesarean (VBAC) – Queensland Clinical Guidelines	
Author	Clinical Excellence Queensland, Queensland Health
Link	https://bit.ly/32vtH2Z

Birth after previous caesarean section	
Author	The Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Link	https://bit.ly/32p9hZB

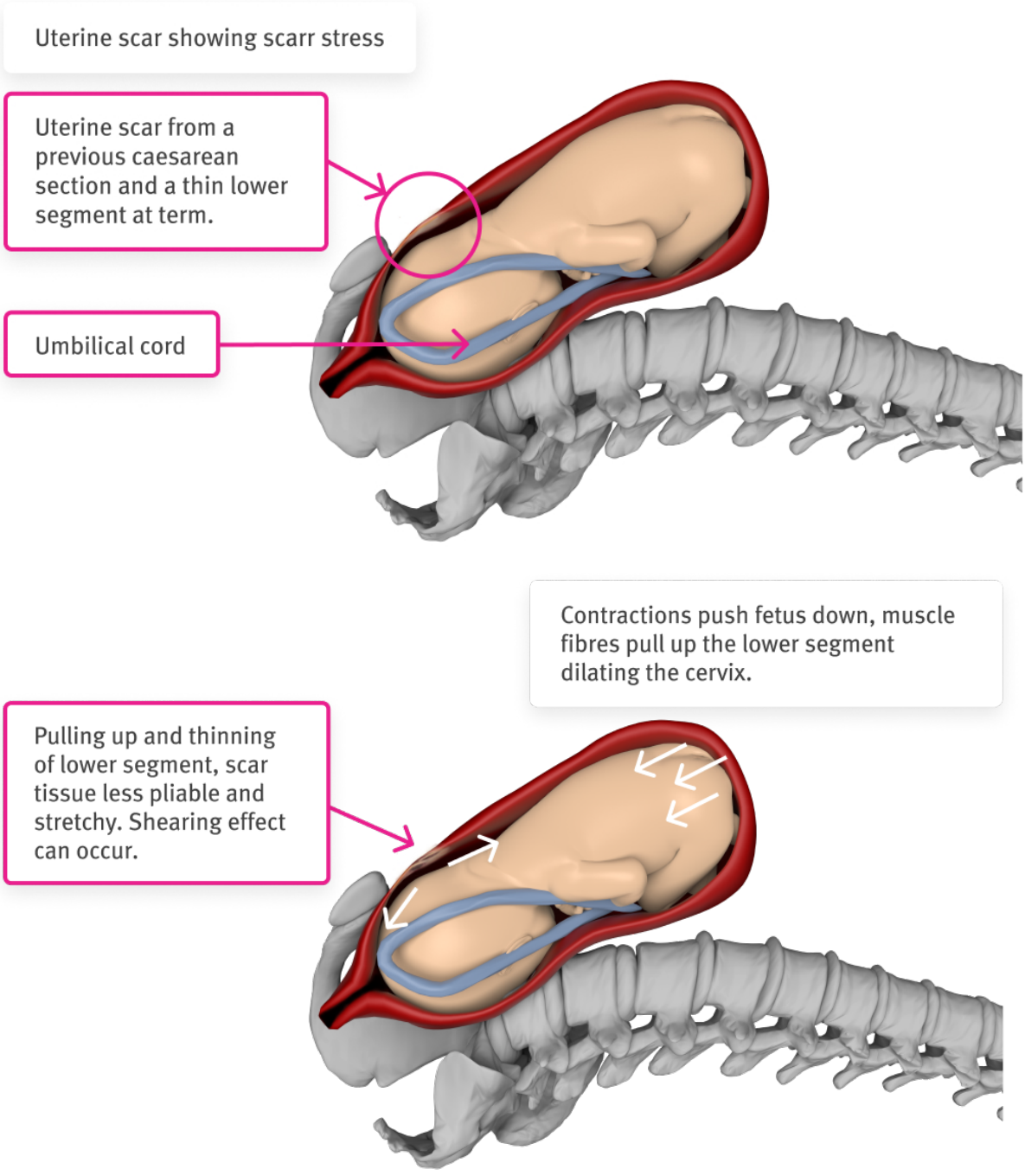
Uterine rupture – South Australian Perinatal Practice Guideline	
Author	Department of Health and Ageing, Government of South Australia
Link	https://bit.ly/2JJLTzk

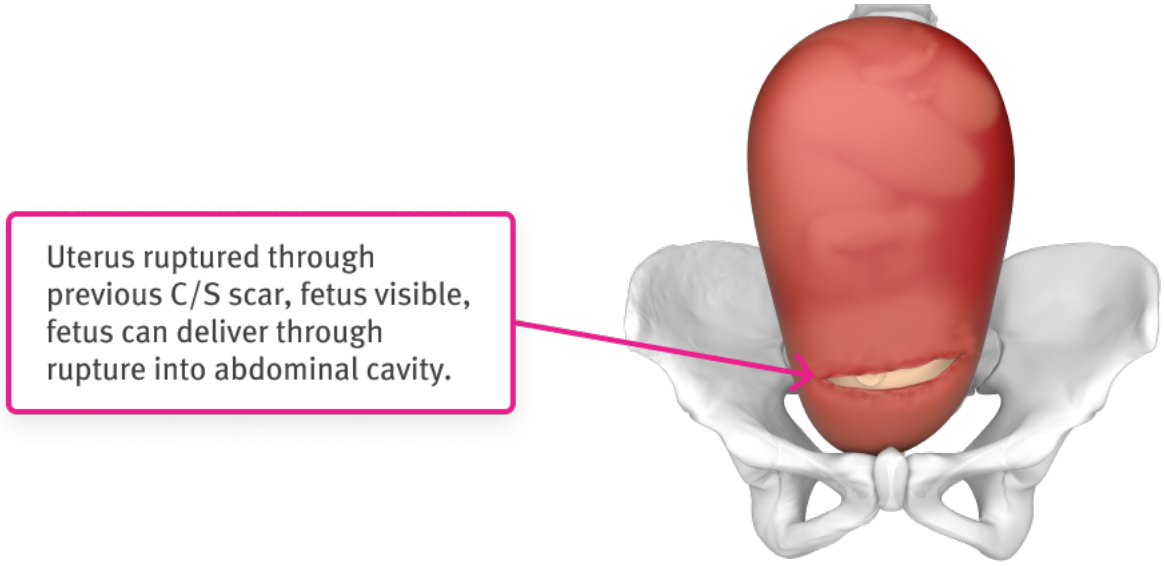
A Case Series of Uterine Rupture: Lessons to be Learned for Future Clinical Practice	
Author	Vladimir Revicky, Aruna Muralidhar, Sambit Mukhopadhyay, and Tahir Mahmood
Link	https://bit.ly/38s5yyj

Uterine Rupture in Pregnancy	
Author	Gerard G Nahum, Krystle Quynh Pham
Link	https://bit.ly/2Il3FZ4

Emergency Management

Management of uterine rupture





Powerpoint presentation

Uterine Rupture can be downloaded from https://bit.ly/2VrxOcu

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Simulation Event

This section contains the following documents:

1. Pre-simulation briefing poster
2. Immersive in-situ scenario
3. Physical resources
4. Human resources
5. Simulated patient script information
6. Handover card
7. Additional information
8. Stage 1 – Initial assessment
9. Stage 2 – Ongoing management
10. Stage 3 – Resolution

Pre-simulation Briefing

Establishing a safe container for learning in simulation.

1 Clarify objectives, roles and expectations

- Introductions.
- Learning objectives.
- Assessment (formative vs summative).
- Facilitators and learners' roles.
- Active participants vs observers.

2 Maintain confidentiality and respect

- Transparency on who will observe.
- Individual performances.
- Maintain curiosity.

3 Establish a fiction contract

Seek a voluntary commitment between the learner and facilitator.

- Ask for buy-in.
- Acknowledge limitations.

4 Conduct a familiarisation

- Manikin/simulated patient.
- Simulated environment.
- Calling for help.

5 Address simulation safety

Identify risks.

- Medications and equipment.
- Electrical or physical hazards.
- Simulated and real patients.

Note: Adjust the pre-simulation briefing to match the demands of the simulation event, contexts or the changing of participant composition.

Adapted from Rudolph, J., Raemer, D. and Simon, R. (2014). Establishing a Safe Container for Learning in Simulation. Simulation in Healthcare: Journal of the Society for Simulation in Healthcare, 9(6), pp.339-349.

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Scenario

Type	Immersive in-situ scenario
Target audience	Obstetric medical staff and midwives
Overview	Birth suite standard set up **Situation** Presented in spontaneous labour at 40+2/40 in active labour. VE 2 hours ago 5cm dilated, fully effaced (FE), membranes # at last VE. ROT - 2cm. Reassessed 30 min ago prior to Epidural – no change. **Background** 28 year old G2P1. 40+2/40 gestation, previous birth 2 years ago emergency C/S for fetal distress & failure to progress at 6cm (OP position). • Low risk pregnancy planned VBAC. • Hb 110 @ 36/40 • A Pos • GBS Negative • All other serology NAD • Allergies – Penicillin - rash • Medical history – MVA 5 years ago # ankle, # ribs • USS 20 weeks – NAD **Assessment:** • In active labour contractions 3:10 lasting 50 sec, becoming stronger, membranes ruptured clear liqourliquor. Using N2O2. • Epidural just sited. • Routine labour care. **Recommendations:** • Observe CTG. • Plan for augmentation due to slow progress – synto. ready to start.
Learning objectives	Participants are required to: • Manage the post epidural woman with a VBAC.

	• Identify the risk factors associated with a uterine rupture.
	• Identify early the signs of uterine rupture.
	• Recognise and respond to a clinically deteriorating patient with a uterine rupture.
	• Implement emergency management of uterine rupture.
	  ○ Call for help early.
	  ○ Emergently prepare for CAT 1 OT.
	  ○ Call appropriate personnel to manage situation – obstetric team, theatre, anaesthetics, paediatrics.
	  ○ Manage unstable patient.	

Duration	Pre-brief: 10 minutes Orientation: 5 minutes Simulation: 15 mins Debrief: 15 mins	Total: 45 mins Allow 15 minutes for set up

Physical resources

Room set up	Standard birth suite room
Simulator/s	Simulated patient with a pregnant abdomen *or* Manikin (including software)
Simulator/s setup	**If working with a simulated patient** - simulated patient sitting in bed wearing a hospital nightie with: • Pregnant abdomen at term in labour with CTG on • Part task trainer in between legs with peri pad in situ • Fetus in trainer ROT position -2cm station 2/5 head above brim • Show on pad – turning to blood loss during scenario • Using N2O2 for pain relief – epidural just sited **If using a manikin** - full manikin semi recumbent in bed with pregnant abdomen on and wearing a hospital gown with: • Pregnant abdomen at term in labour with CTG on • Birthing perineum with peri pad in situ • Fetus in trainer ROT position -2cm station 2/5 head above brim • Heavy show on pad – turning to blood loss during scenario • Using N^2O^2 for pain relief – epidural just sited
Clinical equipment	Standard birth suite room set up

Access	IVC - X1 N/Saline 1000mls
Other	Pregnancy held record (PHR), chart and relevant paperwork for emergency management.

Human resources

Faculty	x2 Facilitators (Obstetric Reg/Consultant and midwife with debriefing experience) to take on roles of scenario lead and primary debriefer
Simulation Coordinators	**If using a manikin** – x1 SimCo for manikin set up and control of software during scenario
Confederates	**If using a simulated patient:** • Simulated patient x1 • Confederate x1 to play the part of patient support person. • Facilitator to provide handover
Other	Midwife x1 is present in the simulation room to receive the handover. The other midwives and doctors are outside the room, to be called in as needed.

Simulated patient script information

You are Samantha. You have presented in labour four hours ago and you have been contracting for about eight hours. You presented to hospital early as you had an emergency C/S with your last baby two years ago due to fetal distress and slow progress. You managed last time to get to 6cm but your baby was in a posterior position and you did not go past this point. You are planning to try to have a normal birth and you are happy you have gone into labour yourself, as you were induced last time which made it a long process.

You had planned not to have much pain relief - you have tried the gas and it's making you feel nauseated and you're not keen on morphine, as last time you felt really 'out of it'. You have just had an epidural and you are starting to feel more comfortable now. You are disappointed you are still 5 cm but due to what happened last time you were keen to have some pain relief before the syntocinon was started, as you remember it was terrible last time.

Allow the scenario to start to unfold, let the staff start the syntocinon as planned but within a few minutes start to have some breakthrough pain on one side that does not go away. Ask if the anaesthetist can come back and give you some more drugs.

Then you will hear the fetal heart rate decelerate, then you need to be in a lot of pain as this occurs, then settle back to a milder pain while they sort you out for a CAT 1 C/S.

You're now frightened as all is all happening very quickly – ask "is my baby OK"?

Handover card

I Introduction	This is Samantha, this is … ‹staff name›
S Situation	Sam presented in spontaneous labour at 40+2/40 in active labour. VE 2 hour ago 5cm dilated, FE, membranes # at last VE, ROT -2cm. Reassessed 30 min ago prior to epidural – no change.
B Background	28 year old G2P1. 40+2/40 gestation, previous birth 2 years ago emergency C/S for fetal distress & failure to progress at 6cm (OP position). • Low risk pregnancy planned VBAC • Hb 110 @ 36/40 • A Pos • GBS Negative • All other serology NAD • Allergies – Penicillin - rash • Medical history – MVA 5 years ago # ankle, # ribs • USS 20 weeks – NAD
A Assessment	• In active labour contractions 3:10 lasting, 50 sec. becoming stronger, membranes ruptured clear liquor. Using N2O2 as epidural has just been sited and is starting to work. • Routine labour care.
R Recommendation	• Observe CTG. • Plan for augmentation with syntocinon due to slow progress. • Syntocinon has been prescribed but Sam asked to get the epidural before we start. • The registrar is keen for us to start ASAP.

Additional information

Name	Samantha Young
Age	28 years old
Sex	Female
Weight	70 kg

Allergies	Penicillin – rash
Medications	Nil
Medical/Surgical	Previous emergency C/S due to fetal distress and failure to progress at 6 cm Previous # ankle & ribs in MVA 5 years ago
Social History/Employment	P/T Sales Executive Clinique
Partner's name	Jarred

Pregnancy history	G2P1
Blood Group	A Pos antibodies Neg
Hb	110 – 36 weeks
Serology	Neg
Rubella	Immune
GBS	Unknown
USS 20 weeks	20 weeks – Anterior placenta non praevia

<table>
<tr><th colspan="4">State 1: Initial assessment</th></tr>
<tr><th colspan="2">Vital signs</th><th>Script</th><th>Details</th><th>Expected actions</th></tr>
<tr><td>RR</td><td>16</td><td rowspan="11">Sam:

Has just had an epidural and you are starting to feel more comfortable now.

Disappointed with your progress but happy start syntocinon now.</td><td rowspan="11">I Introduction
This is Sam, this is … ‹staff name›

S Situation
• Presented in spontaneous labour at 40+2/40 in active labour. VE 2 hour ago 5cm dilated, FE, membranes intact ROT -2cm.
• Reassessed 30 min ago prior to Epidural – no change.

B Background
• 28 year old G2P1. 40+2/40 gestation, previous birth 2 years ago emergency C/S for fetal distress & failure to progress at 6 cm (OP position).
• Low risk pregnancy, planned VBAC.
• Hb 110 @ 36/40
• A Pos</td><td rowspan="11">☐ Introduce self, find out history.
☐ Take maternal obs, perform abdominal palpation.
☐ Check CTG.
☐ Check epidural.
☐ Check synto. and commence.
☐ Check resus gear.</td></tr>
<tr><td>SPO²</td><td>98%</td></tr>
<tr><td>BP</td><td>110/70</td></tr>
<tr><td>HR</td><td>100</td></tr>
<tr><td>Temp</td><td>37.2°C</td></tr>
<tr><td>Consciousness sedation score</td><td>Alert</td></tr>
<tr><td colspan="2">FH
120 some variable decelerations – abnormal unlikely</td></tr>
<tr><td>PV loss</td><td>Bloody mucous show</td></tr>
<tr><td>BGL</td><td>N/A</td></tr>
<tr><td></td><td></td></tr>
</table>

State 1: Initial assessment				
Vital signs		**Script**	**Details**	**Expected actions**
			• GBS Negative • All other serology NAD • Allergies – Penicillin - rash • Medical history – MVA 5 years ago # ankle, # ribs. • USS 20 weeks - NAD **A** Assessment • In active labour contractions 3:10, lasting 50 sec. becoming stronger, membranes # last VE. Using N2O2. Epidural just sited. • Routine labour care. **R** Recommendation • Observe CTG. • Plan for augmentation due to slow progress – synto ready.	

<table>
<tr><th colspan="4">State 2: Ongoing management</th></tr>
<tr><th colspan="2">Vital signs</th><th>Script</th><th>Details</th><th>Expected actions</th></tr>
<tr><td>RR</td><td>24</td><td rowspan="10">Sam:

Staff starts the syntocinon as planned. Within a few minutes of commencement, Sam experiences some break through pain on one side that does not go away.

“Can the anaesthetist come back and give me more drugs?”

Fetal heart rate decelerates.

Acute pain which then settles back to milder pain as you are prepared for CAT 1 C/S.

Acute pain phase:

Show signs of shock:
• pale
• sweaty
• tachycardia
• nauseated
• restless</td><td rowspan="10">• Breakthrough pain starts as mild discomfort
• Once fetal heart deceleration occur there is acute pain which then settles while getting Sam ready for CAT 1 C/S

Signs of shock:
• nauseated
• sweaty
• tachycardia
• restless</td><td rowspan="10">☐ Recognise the uterine rupture.
☐ Declare emergency.
☐ Call for help.
☐ DRABC
☐ Facial O^2 – 15 L via rebreather
☐ Commence IV fluids.
☐ 2nd IV line
☐ Call consultant.
☐ Document actions.
☐ Call a CAT 1.
☐ Move to OT quickly.</td></tr>
<tr><td>SPO2</td><td>97%</td></tr>
<tr><td>BP</td><td>100/60</td></tr>
<tr><td>HR</td><td>118</td></tr>
<tr><td>Temp</td><td>NR</td></tr>
<tr><td>Consciousness sedation score</td><td>Alert</td></tr>
<tr><td colspan="2">FH
Baseline 120 dropping dramatically to prolonged deceleration</td></tr>
<tr><td>PV loss</td><td>Fresh bleeding</td></tr>
<tr><td>BSL</td><td>N/A</td></tr>
</table>

QMEWT Observations (5-minute OBS)

State 2: Vital signs						
Time	Uterine Rupture	5 mins	10 mins	Transfer to OT	15 mins	20 mins
RR		28	24			
SPO2		94%	96%			
O2 Flow		15L	15L			
BP/ART		80/50	90/60			
HR		120	122			
TEMP		NR	NR			
GCS consciousness		Restless in pain	Restless in acute pain			
PV Loss		50mls	50mls			
FH		60	45			
Q- MEWT Score		Not able to calculate due to incomplete Obs.	Not able to calculate due to incomplete Obs.			

State 3: Resolution				
Vital signs		**Script**	**Details**	**Expected actions**
RR SPO² BP HR Temp Consciousness sedation score PV loss BSL	See QMEWT table for OBS.	Sam: Frightened as CAT 1 – ask is “my baby OK?”	• Recognises the uterus rupture • Transfers to OT ASAP	☐ Recap on management as you go to OT. ☐ Continue 5 minutely Obs. ☐ Reassure the patient and tell her what has happened. ☐ Make a plan of care. ☐ Transfer to OT. ☐ Quick debrief to Sam on route.

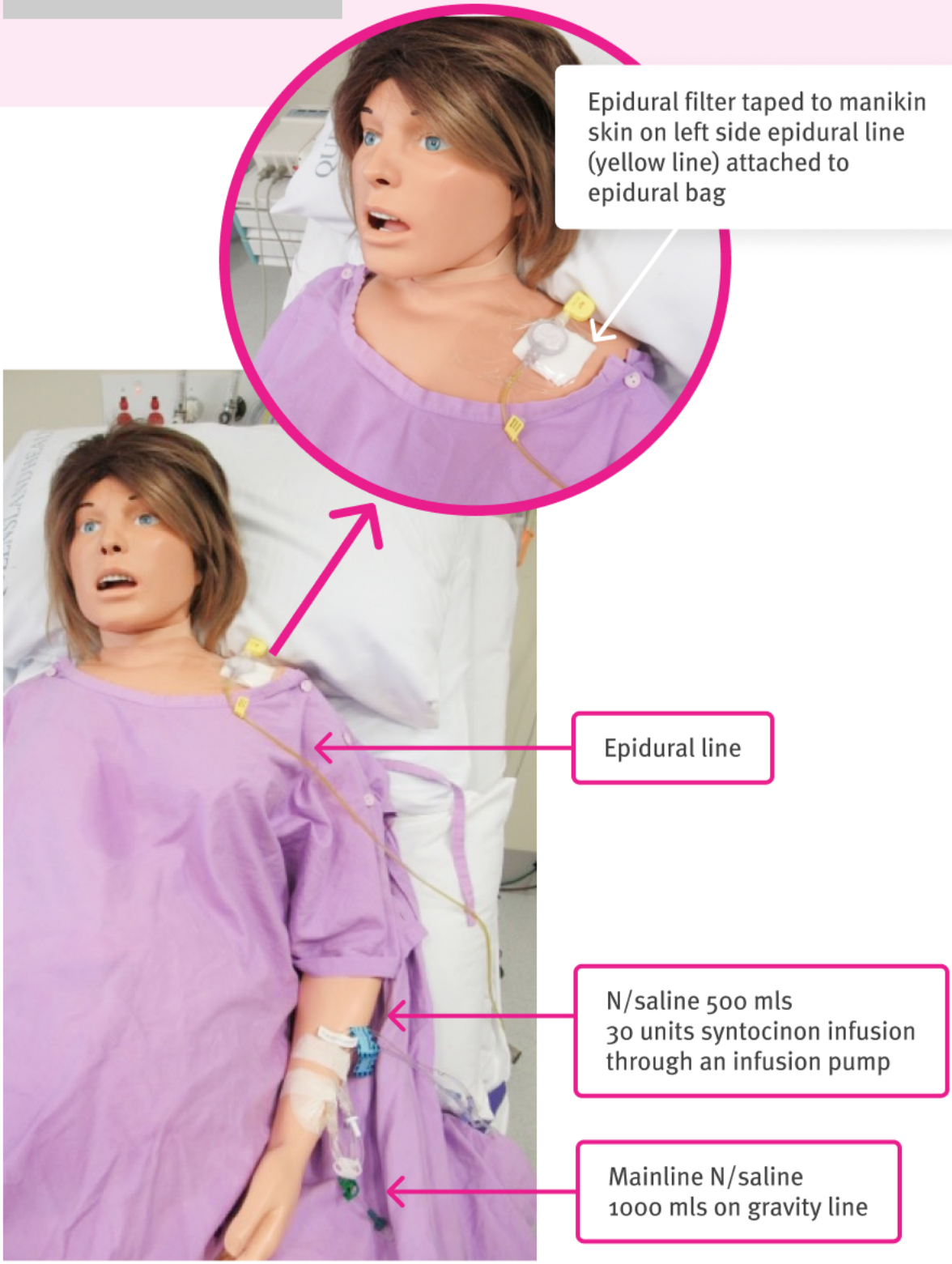
Supporting Resources

This section contains the following supporting documents that will be essential in the delivery of this learning package:

1. Manikin set-up guide
2. Laboratory reports
3. CTG on admission
4. Current CTG - 2nd stage pushing
5. Simulation debriefing poster
6. Debriefing guide

More resources can be downloaded from our website.

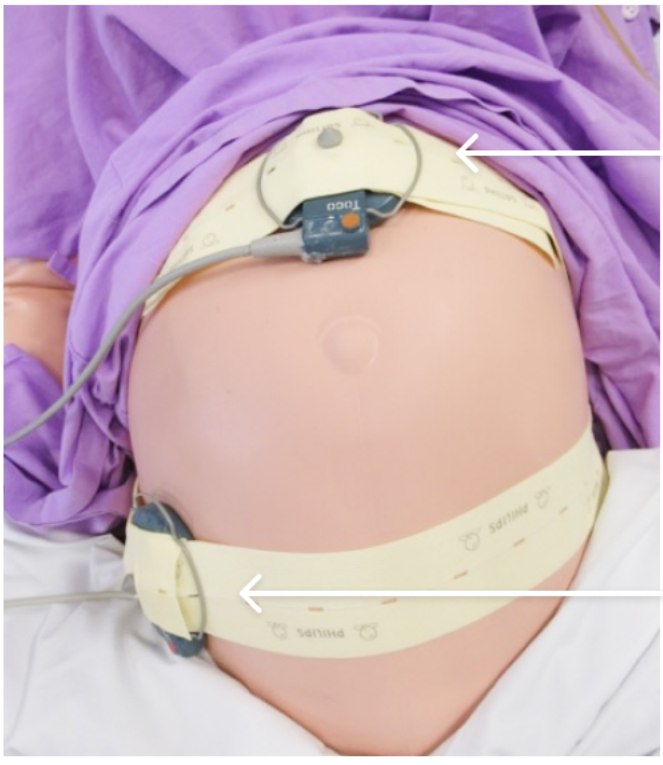
Epidural setup



Fetal lie

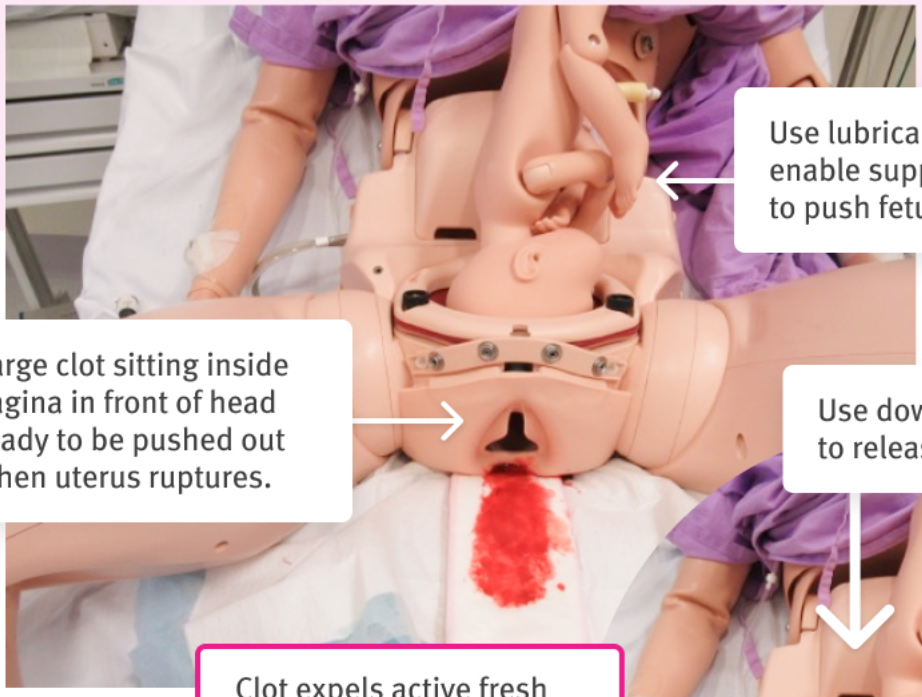
Fetal back to the maternal left head down (LOT)

Fetal head in pelvis 2/5 head above pelvic rim



TOCO placement on top uterine fundus

USS probe placed on maternal left

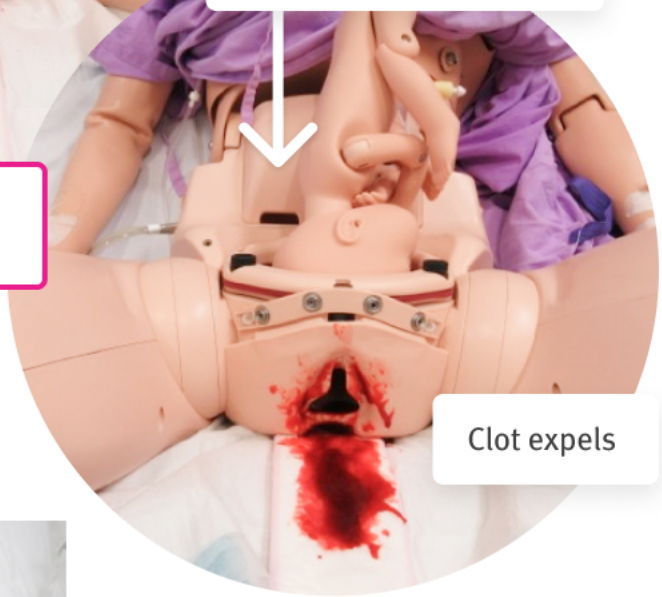


Use lubricant on fetus to enable support person to push fetus down.

Large clot sitting inside vagina in front of head ready to be pushed out when uterus ruptures.

Use downward pressure to release clot

Clot expels active fresh PV loss



Clot expels

Support person's arm in abdomen ready to push the baby out and then invert the uterus

36 week Routine
DATE:
PATIENT:
DOB:

LABORATORY REPORT
PAGE: 1
REF:

Test	**Result**	**Comment**
Group and Antibody Screen		
Group	A Rh (D) Positive	
Antibody	Negative	
		Nil
Expires in 7 days		

36 week Routine
DATE:
PATIENT:
DOB:

LABORATORY REPORT
PAGE: 1
REF:

Test	Result	Reference	Comment
Haemoglobin	110 g/dL	13.7-17.7g/dL	
WCC	16.0	3.9-10.6 x 109/L	
Platelets	130	150-440 x 109/L	
Haematocrit	0.42	0.39 – 0.52	
RCC	5.00	4.50 – 6.0x1012/L	
MCV	93 fL	80 – 100 fL	
Neutrophils	(83%) 8.15	2.0 – 8.0x109/L	
Lymphocytes	(10%) 2.18	1.0 – 4.0x109/L	
Monocytes	(6%) 0.52	0.1 – 1.0x109/L	
Eosinophils	(0%) 0.05	<0.60x109/L	
Basophils	(0%) 0.07	<0.20x109/L	

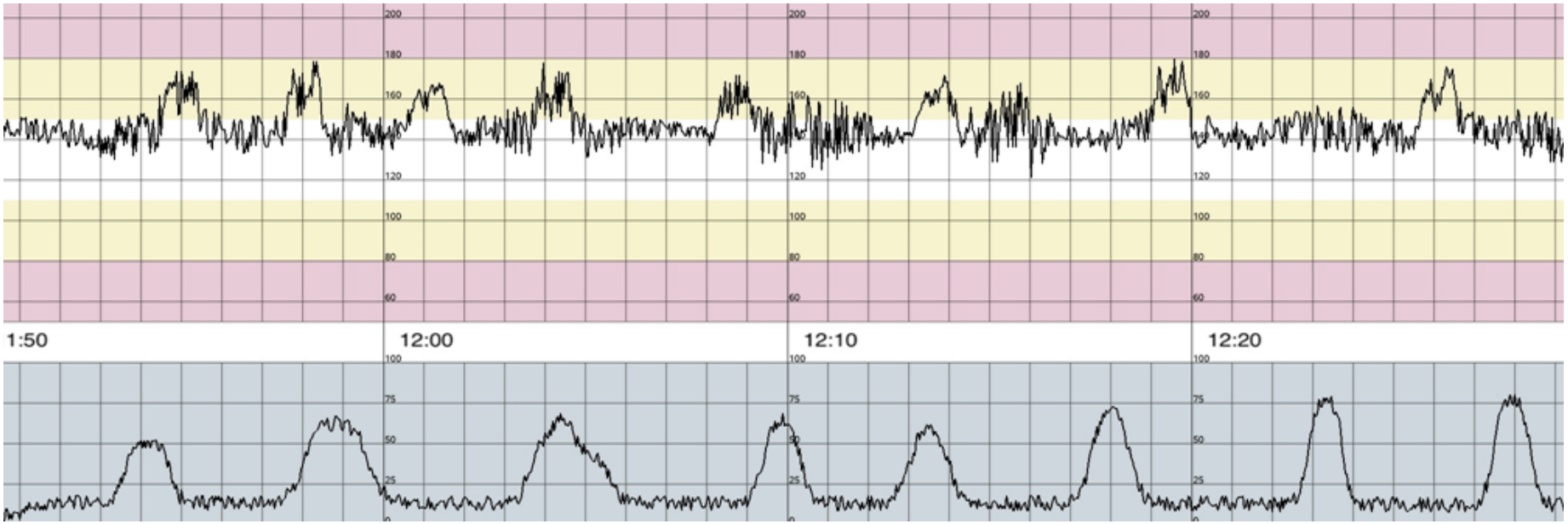
36 week Emergency Admission
DATE:
PATIENT:
DOB:

LABORATORY REPORT
PAGE: 1
REF:

Test	Result	Reference	Test	Result	Reference
Sodium	140 mmol/L	135-145 mmol/L	Urate		
Potassium	4.2 mmol/L	3.5-5.2 mmol/L	Protein (total)	69 g/L	60-83 g/L
Chloride	100 mmol/L	95-110 mmol/L	Albumin	38 g/L	35-50 g/L
Bicarb.	26 mmol/L	18-26 mmol/L	Bilirubin (total)	20 umol/L	<20 umol/L
Anion Gap	10 mmol/L	4-13 mmol/L	Bilirubin (conj)	<4 umol/L	<4 umol/L
Glucose	4.6 mmol/L	3.0-7.8 mmol/L	Gamma GT	8 umol/L	<55 u/L
Urea	6.2 mmol/L	2.1-7.1 mmol/L	AST	30 U/L	<35
Creatine	52 umol/L	32-73 umol/L	ALT	40 U/L	<45
Urea/Creat	73	40 -100	ALP	100 U/L	56 - 119
eEFG	>90 ml/min	>60 ml/min	Calcium	2.38 mmol/L	2.10-2.60 mmol/L
Phosphate	1.00 mmol/L	0.75-1.50 mmol/L	Corr ca	2.47 mmol/L	2.10-2.60 mmol/L
Magnesium	0.86 mmol/L	0.70-1.10 mmol/L	OSM (calc)	280 mmol/L	270-290 mmol/L

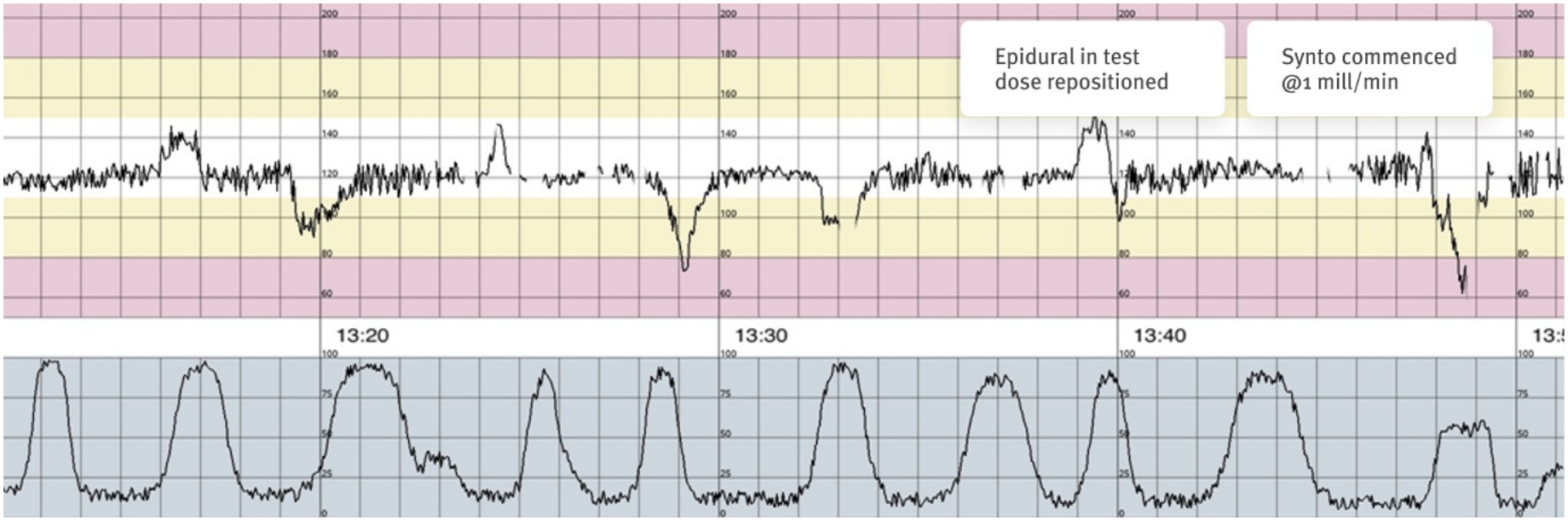
CTG Admission VBAC

CTG 1 – Admission



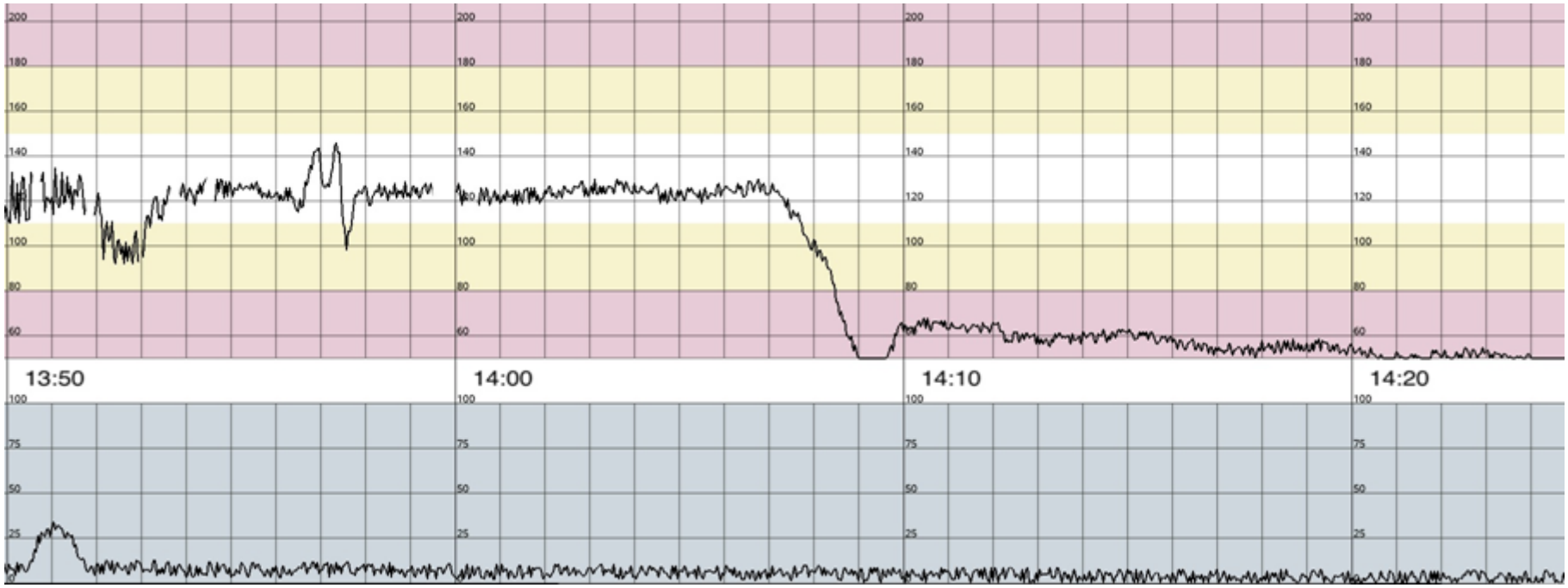
CTG Labour

CTG 2



CTG Labour post epidural VBAC

CTG 3 – Post epidural CTG



Simulation Debriefing

Establishing a safe container for learning in simulation.

1 Reaction phase - "vent"

- How was that?
- How are you feeling?
- Any other initial reactions?
- Learners may reveal key areas that are important to them.

2 Description phase

- Clinical summary of the case.
- Can be shortened if it appears there is shared understanding of the case.

3 Analysis phase

Select which strategy is suited.

- Learner Self-Assessment - learner generates objectives

  What went well/what would you change?
  What well/did not go well and why?

- Focused Facilitation - analyse performance related to objective

4 Summary phase

- Discuss take-home learning points
- Learner guided approach or
- Facilitator guided approach

Adapted from Eppich, W. and Cheng, A., 2015. Promoting Excellence and Reflective Learning in Simulation (PEARLS). Simulation in Healthcare: The Journal of the Society for Simulation in Healthcare, 10(2), pp.106-115.

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Debriefing guide

Scenario objectives	Participants are required to: ☐ Manage the post epidural woman with a VBAC. ☐ Identify the risk factors associated with a uterine rupture. ☐ Identify early the signs of uterine rupture. ☐ Recognise and respond to a clinically deteriorating patient with a uterine rupture. ☐ Implement emergency management of uterine rupture. • Calling for **HELP** early. • Emergent preparation for CAT 1 OT. • Calling for appropriate personnel to manage situation. • Managing unstable patient.
Vent phase	Example questions: • Initial thoughts of how the simulation went? • Acknowledge emotions (note body language and tone of participants)
What happened (phases)?	Example questions: • Tell us about your patient and what were your initial priorities? • What led to your decision to escalate management? • What clinical signs and symptoms led you to become concerned?
What was done well and why?	Example question: What could have been better at each phase?
Relevance to experience	Example question: How would you transfer knowledge from today into your workplace?
What has been learned?	Example question: What actions will you take to enhance your skills and knowledge post simulation?
Transfer to clinical settings	Example questions: • What will you take away from this session? • Can you give an example of how you could apply new skills or knowledge gained during this session in your clinical setting?

Key moments	• Recognition of uterine rupture. • Recognition of deterioration and shock. • Calling for **HELP** early. • Having key team members present. • Preparing and planning for ongoing management – CAT 1.

Acronyms and Abbreviations

Term	Definition
BP	Blood pressure
CAT 1	Category 1
CTG	Cardiotocograph
C/S	Caesarean section
DRABC	Danger, Response, Airway, Breathing, Circulation
FE	Fully effaced
FH	Fetal heart
GBS	Group B streptococcus
Hb	Haemoglobin
IVC	Intravenous cannula
MVA	Motor vehicle accident
MEP	Maternity Education Program
NAD	Nothing abnormal detected
NCHI	Nation Centre for Biotechnology Information
N^2O^2	Nitrous Oxide / Oxygen
Obs.	Observations
OP	Occipital posterior
OT	Operating Theatre
PHR	Pregnancy health record
RANZCOG	Royal Australian and New Zealand College of Obstetrics and Gynaecology
ROT	Right occipital transverse
Synto.	Syntocinon
USS	Ultrasound scan
VBAC	Vaginal birth after caesarean
VE	Vaginal Examination

References

This resource kit is inspired by the Optimus BONUS project of the Children's Health Queensland's "Simulation Training Optimising Resuscitation for Kids" service. To know more information about STORK and their Optimus project, visit their website at https://bit.ly/3km1wcZ.

1. Nahum GG, Pham KQ. Medscape. [Online].; 2018 [cited 2020 11 10. Available from: https://reference.medscape.com/article/275854-overview.

2. Smith JF, Wax JR. UpToDate. [Online].; 2019 [cited 2020 11 10. Available from: https://www.uptodate.com/contents/uterine-rupture-unscarred-uterus#:~:text=Most%20ruptures%20occur%20in%20women,the%20scarred%20uterus%20%5B1%5D.

3. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. RANZCOG. [Online].; 2019 [cited 2020 11 10. Available from: https://ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/Women%27s%20Health/Statement%20and%20guidelines/Clinical-Obstetrics/Birth-after-previous-Caesarean-Section-(C-Obs-38)Review-March-2019.pdf?ext=.pdf.

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Uterine Rupture – Facilitator Resource Kit

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