

PPH – Placental Abruption

Obstetric Simulation

Name:	Eleanor Griffiths	Observation at start		CRT:	2s	
D.O.B.	23/11 (33Y)	RR:		12	Temp:	36.9
Address:	(Insert local address)	ETCO2:		4.3	BM:	6.3
		Sats:		99% on 50%	Weight:	Booking 70kg
Hospital ID:	K176482	Heart Rate:		85	Allergy	NKDA
Ward:	Labour ward	BP:		100/50		
Background to scenario			Specific set up			
A patient with a history of APH in spontaneous labour is taken to theatre for a foetal bradycardia. She is found to have a placental abruption which leads to a PPH.			Mannequin in theatre, intubated Cannulated with fluids running as local policy Draped, surgery started Blood and suction available for start			
Required embedded faculty/actors			Required participants			
ODP Obstetrician Scrub practitioner			Anaesthetists Can be extended to MDT sim			

Past Medical History

Childhood asthma, otherwise well 36+4/40 G1P0. 2x APH – assessed in ABC and discharged No previous anaesthetics, reflux in pregnancy

Hb 99, WCC 11.2, Plt 250

Drugs Home	Drugs Hospital
Inhalers in childhood	GA drugs – following local protocols
Pregnancy vitamins only	Anaesthetised sufficient for surgery to start

Brief to participants

You are the anaesthetist on labour ward

Eleanor Griffiths is 36+4/40. She has had 2 previous episodes of APH but discharged after assessment. She went into spontaneous labour, at 8cm cervical dilatation she had a foetal bradycardia and a Cat 1 section was called.

She had a GA, was intubated and surgery has just begun

Scenario Direction Stage 1, 0- 5 minutes A Intubated B Ventilating with appropriate mode, sats 99% on FiO2 0.5 ETCO2 4.3 C HR 85, BP 100/55, IV fluids infusing. DE Sedated on sevoflurane (MAC>1) or local protocol. Abruption found as surgery is started Rx Awareness of potential for abruption and PPH Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage Stage 2, 5-10 minutes A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly Rx Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for communication and MDT approach					
 A Intubated B Ventilating with appropriate mode, sats 99% on FiO2 0.5 ETCO2 4.3 C HR 85, BP 100/55, IV fluids infusing. DE Sedated on sevoflurane (MAC>1) or local protocol. Abruption found as surgery is started Rx Awareness of potential for abruption and PPH Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage					
Ventilating with appropriate mode, sats 99% on FiO2 0.5 ETCO2 4.3 C HR 85, BP 100/55, IV fluids infusing. DE Sedated on sevoflurane (MAC>1) or local protocol. Abruption found as surgery is started Awareness of potential for abruption and PPH Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage Stage 2, 5–10 minutes A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly Rx Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
C HR 85, BP 100/55, IV fluids infusing. DE Sedated on sevoflurane (MAC>1) or local protocol. Abruption found as surgery is started RX Awareness of potential for abruption and PPH Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage Stage 2, 5–10 minutes A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly RX Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
Sedated on sevoflurane (MAC>1) or local protocol. Abruption found as surgery is started RX Awareness of potential for abruption and PPH Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage Stage 2, 5–10 minutes A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly RX Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for	Ventilating with appropriate mode, sats 99% on FiO2 0.5 ETCO2 4.3				
Awareness of potential for abruption and PPH Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage Stage 2, 5–10 minutes A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly RX Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for	HR 85, BP 100/55, IV fluids infusing.				
Recognition of potential PPH by MDT and communication to all members of the team Planning resuscitation, call for help, consider setting up cell salvage Stage 2, 5–10 minutes A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly Rx Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
A Intubated. Ventilating with appropriate mode, sats 99% on FiO2 0.5 B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly Rx Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
B HR 120, BP 85/43 C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly Rx Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
C Consideration of depth of anaesthesia DE Baby delivered, EBL 1.5-2L quickly Rx Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
Baby delivered, EBL 1.5-2L quickly Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
PRX Declare PPH/MOH, call for appropriate help, consider cause of PPH 2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
2 wide bore IV access points, bloods (FBC, clotting, fibrinogen), POC tests TXA, Ca, oxytocics – oxytocin, ergometine, Carboprost (history of asthma – decide risks vs benefits Fluid/blood resuscitation as per local policy, active warming Maintain constant communication with obstetric team Consideration of post op destination Simulation can run with a concurrent neonatal resuscitation to increase challenge, need for					
	ts)				

Guidelines						
F Plaat, BA MBBS FRCA, A Shonfeld, MBBS FRCA, Major obstetric haemorrhage, BJA Education, Volume 15, Issue 4, August 2015, Pages 190–193, https://doi.org/10.1093/bjaceaccp/mku049 Mavrides E, Allard S, Chandraharan E, Collins P, Green L, Hunt BJ, Riris S, Thomson AJ on behalfof the Royal College of Obstetricians and Gynaecologists. Prevention and management of postpartum haemorrhage.BJOG 2016;124:e106–e149						
Guidance for ODP role	Guidance for other roles					
Can keep quiet about findings and ongoing blood loss Can become task focussed, not recognising need for escalation	Support with neonatal management Scribing, making calls, other necessary roles					
Guidance for Role e.g. ITU/Anaesthetic Senior	Guidance for other role					
Competent but lacking initiative	Can make lots of noise to make scenario more challenging					
Other potential challenges	Additional challenges					
A neonatal resuscitation can be required of the baby which will divide resources and require an MDT approach						
Session Objectives						
Clinical Management of PPH						

Coordinating team activity, exchanging information with MDT, using assertiveness,

Planning and preparing, prioritising, identifying and utilising resources appropriately

Gathering information on entering, recognising critical incident, anticipating events

Identifying options for management, balancing risks, continuous re-evaluation

Tell us how you found this simulation scenario resource.

Give us feedback (5 mins) here: https://forms.office.com/e/etz7yZf0aa Or scan the QR code below:

Management of placental abruption

appropriate delegation and supporting colleagues



Non-technical skills

Task management

Decision making

Situational awareness

Teamworking



