

SCENARIO

Maternal Collapse- Amniotic Fluid Embolism

LEARNING OBJECTIVES

Demonstrate team working and communication skills
Use SBAR handover
Recognition of the collapsed patient
Initiate ABCDE assessment and resuscitation
Be aware of the mortality and morbidity associated with AFE for mother and baby
Anticipate the AFE sequel – coagulopathy/ obstetric haemorrhage

EQUIPMENT LIST

Noelle/ Baby Hal	Peri-mortem LSCS kit
Arrest trolley	Blood Bottles/request forms
Fluids / giving sets	Phone
Monitor for manikin	Neonatal Resus Bag

PERSONNEL

MINIMUM: 6
ROLES:
Obstetrics 2
Anaesthetics 2
Paeds 1-2
Midwives 1-2

FACULTY

MINIMUM: 5
Facilitator (act as first MW)
Observer x2
Debrief Lead
Scribe

TIME REQUIRMENTS

TOTAL 1.5hours

Set up: 30 mins	Simulation: 20mins
Pre Brief: 10 mins	Debrief: 30mins

INFORMATION TO CANDIDATE

PATIENT DETAILS

Name: Anita Singh

Age: 40yrs

Weight/BMI: 55kg/24

Phx: Gestational Diabetes

Allergies: nil

Rhesus +ve

SCENARIO BACKGROUND

Location: Labour Ward

Situation: You are crash bleeped to LW
Anita is G2P1 40+10 gestation in spontaneous labour
The midwife has just performed an ARM for delayed progress in second stage
She has now become unresponsive, gasping and cyanosed.

Task: Please assess the patient

RCOG CURRICULUM MAPPING

Module: 10 Management of labour Ward
Maternal Collapse
Liaise with Staff

INFORMATION FOR ROLEPLAYERS

BACKGROUND

NA Patient unresponsive

RESPONSES TO QUESTIONS

INFORMATION TO FACILITATOR

SCENARIO DIRECTION

Assessment and ABCDE resuscitation

Confirmation Obstetric Emergency 2222

Confirm Obs/Anaesthetic Consultants are informed to attend

(STAGE 1) O2 assist ventilation, IV access, 1L Hartmanns stat, vasopressors, left lateral

Consider differential diagnosis? Amniotic fluid embolism, pulmonary embolism, air embolism.

Decision to intubate room vs OT

(STAGE 2) She has a PEA arrest on induction

Commence CPR and ALS

After the first 3 minutes and 1mg adrenaline there is no return of circulation

Consider Perimortem section.

(STAGE 4) Perimortem section performed in room at 5 minutes. After a second cycle of 3 minutes a pulse felt. Major Obstetric Haemorrhage Protocol to be initiated

Address 4Hs 4Ts

Ongoing management

(STAGE 4) Further resuscitation, stabilisation, investigations, invasive monitoring and arrangement of T/F Ot to complete section and to Intensive Care

SCENARIO OBSERVATIONS/ RESULTS

	BASELINE Initial Assessment LW	STAGE 1 Post Initial Resuscitation	STAGE 2 PEA arrest	STAGE 3 Post Peri Mortem section	STAGE 4 Transfer to OT>GA complete Section
RR	8	8	0	15 BVM	18 Intubated
chest sound	Shallow	Shallow	Nil	Equal	Equal
SpO2	75%	80%	70%	95%	97%
HR	155	130	50 PEA	155	115
Heart sound	Tachy	Tachy	Absent	Tachy	Normal
BP	60/30	85/40	Unrecordable	65/30	110/60 Adrenaline
Temp	36.0C	36.0C	35.2C	35.1C	35.5
Central CRT	8 secs	8 secs	>8secs	7secs	5secs
GCS/AVPU	U	3	U	U	U

Arterial Gas/Lactate:

SCENARIO DEBRIEF

TOPICS TO DISCUSS

Team work and communication under stressful clinical situation
Pathophysiology behind Amniotic fluid embolism
Complications of amniotic fluid embolism DIC/coagulopathy/Obstetric
Haemorrhage
Neonatal/Maternal mortality from AFE
How to diagnose and how clinically it differs from pulmonary embolus/
anaphylaxis

REFERENCES

D.J. Tuffnell UK Amniotic Fluid Embolism Register BJOG: an International Journal of Obstetrics and Gynaecology, December 2005, Vol. 112, pp. 1625–1629

RCOG Green-top Guideline Maternal Collapse in Pregnancy and the Puerperium No. 56 Jan 2011