

SCENARIO

Maternal Collapse- PE

LEARNING OBJECTIVES

Management of Maternal Collapse- ABCDE Approach

List differential diagnosis

Be aware of acute management of PE

Communication with SBAR

EQUIPMENT LIST

Noelle/ SimMom
Fluids / giving sets
Fake hand held notes
ODP grab bag

Arrest trolley
GA drug box for T/F to theatre
IVC packs/Blood Bottles
Monitor for manikin

PERSONNEL

MINIMUM: 5

ROLES:

Obstetric Junior/Reg

Midwife

Anaesthetic Reg/Cons

Obstetric Consultant

FACULTY

MINIMUM: 3

Facilitator

Observer

Debrief Lead

TIME REQUIRMENTS

TOTAL 1.5hours

Set up: 30 mins

Pre Brief: 10 mins

Simulation: 15mins

Debrief: 30mins

INFORMATION TO CANDIDATE

PATIENT DETAILS

| | | | |
|-------------|-------------|------------|----------------|
| Name: | Erica Jones | Phx: | Varicose Veins |
| Age: | 32 | Allergies: | Nil |
| Weight/BMI: | 90kg/38 | | Smoker |

SCENARIO BACKGROUND

Location: Labour Ward

Situation: Erica has just had a forceps delivery of her 2nd baby. 3rd stage is complete, and the ST1 is suturing a small second degree tear. Her epidural is working well. She starts to feel unwell with chest pain and shortness of breath. She then collapses and is unresponsive.

Task: Attend the obstetric emergency call
Take hand over from the team
Manage the collapsed patient

RCOG CURRICULUM MAPPING

Module 10 Management of Labour:

Manage Obstetric Collapse

Liaise with other staff

Advanced Training Skills Module:

Advanced Labour Ward Practice

INFORMATION FOR ROLEPLAYERS**BACKGROUND**

Your name is Erica Jones. You are 32 years old. You have just had a forceps delivery of your second child. You had a good working epidural. You are normally well, but are overweight and smoke. You have had varicose veins in this pregnancy. You have no allergies and have not had any operations.

You begin to feel unwell and anxious 5 minutes after you baby is born. You have chest pain and feel short of breath. Once you mention these to the team you collapse and become unresponsive.

RESPONSES TO QUESTIONS

unresponsive

INFORMATION TO FACILITATOR

SCENARIO DIRECTION

- A:** Compromised snoring –clears with airway maneuvers and OP airway
- B:** Agonal gasping AE equal and vesicular (See obs chart below)
- C:** Pale
- D:** Flexing to pain, pupils equal
- E:** Small amount of bleeding from 2nd degree tear, EBL 500ml, uterus contracted, no rashes

| | |
|--|---------|
| Cardiac arrest PEA | STAGE 1 |
| VF after adrenaline, oxygen and fluids | STAGE 2 |
| Sinus tachycardia after defibrillated | STAGE 3 |

Interventions

STachy Assess ABCDE
 Airway maneuvers and Guedel, BVM assist respiration, Get ready to intubate (ODP equipment, capnography)
 Uterine displacement – immediate postnatal period
 Establish ECG monitoring, BP, P, SpO₂, RR
 IV access and fluid bolus
 Support BP (phenylephrine bolus)

Patient stops breathing and arrests

PEA Check patient confirm cardiac arrest start CPR 30:2
 Call for cardiac arrest team and consultants on call
 Confirm rhythm
 2 minutes CPR (30:2)
 Intubate / Ventilate /Capnography
 Adrenaline 1mg IV every 3 – 5 minutes
 Exclude likely reversible causes: 4Hs & 4 T's

VF Check monitor /confirm rhythm
 1st shock at 120J
 2 minutes CPR continuous
 Regains output =>

STachy Check monitor and rhythm
 Check patient ABCDE

Stabilisation: Ventilation, inotropes, invasive monitoring
 Post resuscitation investigations: =>
 bloods, 12 lead ECG, bedside Echo, CTPA

Critical care involvement: Obstetric / anaesthetic / critical care discussion of likely diagnosis

Consider PE: potential treatments- unfractionated heparin IV vs thrombolytic therapy urgent discussion with medical teams

Transfer to ITU SBAR

SCENARIO OBSERVATIONS/ RESULTS

| | BASELINE | STAGE 1 | STAGE 2 | STAGE 3 | |
|-------------|----------------|----------------|----------------|--------------|--|
| | | PEA | VF | SINUS TACHY | |
| RR | 6 | 0 | 18 intubated | 18 intubated | |
| chest sound | Agonal gasping | nil | equal | equal | |
| SpO2 | unrecordable | unrecordable | 95% | 98% | |
| HR | 110 | 110 | VF | 125 | |
| Heart sound | Sinus tachy | PEA | VF | tachy | |
| BP | 50/30 | Not recordable | Not recordable | 80/50 | |
| Temp | 36.6 | 36.5 | 36.4 | 36.4 | |
| Central CRT | 4secs | >4secs | >4secs | 4 secs | |
| GCS/AVPU | P | U | U | U | |

SCENARIO DEBRIEF

TOPICS TO DISCUSS

Management of cardiac arrest in an obstetric patient
Differences to non-obstetric adult
Uterine displacement –required in immediate postnatal

Review of ALS algorithm / RCOG version

Management of patient post arrest e.g. bloods, ECG, ITU, CTPA

Management of massive PE

REFERENCES

Maternal Collapse in Pregnancy and the Puerperium, Green Top Guideline No.56 Jan 2011 RCOG Press

Thromboembolic Disease in Pregnancy and the Puerperium: Acute Management, Green Top Guideline No.37b April 2015 RCOG Press