## SCENARIO

Maternal Collapse – Uterine Rupture

## LEARNING OBJECTIVES

Effective team working and communication

Use of SBAR to communicate

Coordinating resuscitation and preparation for theatre

Recognition and treatment of uterine rupture maternal collapse and peri-mortem LSCS

## EQUIPMENT LIST

| | |
|---|---|
| Noelle/ Baby Hal | Peri-mortem section kit |
| Arrest trolley | Blood Bottles/request forms |
| Fluids / giving sets | PPH emergency box |
| ODP grab bag plus IO needle | Monitor for manikin |
| Neonatal Resus Bag | Phone |

## PERSONNEL

MINIMUM: 6
ROLES:

| | |
|---|---|
| Obstetrics | 2 |
| Anaesthetics | 2 |
| Paeds | 1-2 |
| Midwives | 1-2 |

## FACULTY

MINIMUM: 5
Facilitator
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: | Lauren Bolder | Phx: on Aspirin |
| Age: | 41yrs | Allergies: Nil |
| Weight/BMI: | 49kg/18 | Rhesus +ve |

## SCENARIO BACKGROUND

Location: Triage/Labour Ward

Situation: Ambulance call centre informed LW they are transferring a patient 35/40 IVF pregnancy abdominal pain and PV bleeding.

G3P2 2 previous LSCS (1st for breech / 2nd for FTP)
Well during pregnancy
Started contracting 12pm today with mild red PV loss
Developed into continuous abdominal pain
Associated haematuria

Task: She has arrived to triage shocked, pale and unresponsive
Please assess and manage the patient

## RCOG CURRICULUM MAPPING

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

Module 11: Management of Delivery
Uterine Rupture a) complicated uterine rupture

INFORMATION FOR ROLEPLAYERS

BACKGROUND

N/A patient unresponsive

RESPONSES TO QUESTIONS

INFORMATION TO FACILITATOR

SCENARIO DIRECTION

Identification of collapsed patient
Emergency Obstetric Crash call 2222 -Obstetric team, Neonatal team, consultant anaesthetist and obstetrician.

STAGE 1
ABCDE assessment and management of hypovolaemic shock on LW
Unable to obtain IV access to volume resuscitate and treat tachycardia /hypotension establish access via intraosseous access
Consider Diagnosis

STAGE 2
Recognition of PEA arrest, start CPR with Uterine displacement, call for theatre team
Peri-mortem section IN THE ROOM, uterine rupture extending into the bladder. 3L heamoperitonuem
Activate Major Obstetric Haemorrhage protocol, run through 4H and 4 T's
2x cycle CPR then output returns

STAGE 3
Baby delivered pale and flat no breathing, pulse < 60, CPR commenced post assessment.
Arrange for transfer to theatre for completion of peri-mortem LSCS.

STAGE 4
Ensure continued volume and blood resuscitation via IO access.
Intubate if not already (radically reduced induction drug doses if tone / movement), continued resus with fluid / vasopressors / inotropes establish consultant anaesthetic and obstetric presence, SBAR handover.
Haemorrhage control medical /surgical, complete LSCS- +/-emergency hysterectomy, uterotonics
Invasive monitoring, stabilise. Arrange for post arrest management: critical care admission, cooling, bloods, ABG. Set up sedation and arrange for transport team.

SCENARIO OBSERVATIONS/ RESULTS

| | AMBULANCE BASELINE | STAGE 1- post initial assessment on LW | STAGE 2 PEA Arrest | STAGE 3 Post Perimortem Section | STAGE 4 Transfer to OT>GA complete Section |
|---|---|---|---|---|---|
| RR | 35 | 8 | 0 | 15 BVM | 18 Intubated |
| chest sound | clear | Shallow | Nil | Equal | Equal |
| SpO2 | 92% | 90% | 70% | 95% | 97% |
| HR | 140 | 190 | 180 PEA | 165 | 115 |
| Heart sound | Normal | Tachy | Absent | Tachy | Normal |
| BP | 80/40 | Unrecordable | Unrecordable | 75/35 | 110/60 Adrenaline |
| Temp | 36.5C | 36.0C | 35.2C | 35.1C | 35.5 |
| Central CRT | 5 secs | 8 secs | >8secs | 7secs | 5secs |
| GCS/AVPU | P | U | U | U | U |

Venous Gas: Hb 60g/L pH 7.15 PCo2 74mmHg

## SCENARIO DEBRIEF

## TOPICS TO DISCUSS

Effectiveness of communication and team working- right personnel and right level of expertise.

SBAR in handover

Early Neonatal involvement

Recognition of peri arrest state

Physiological differences in pregnancy and their effect on resuscitation.

Initiation of ABCDE assessment

Coordination of initial resuscitation

Intra-osseous access as a form of access for volume resuscitation

Recognition of PEA arrest, differential diagnosis 4H 4Ts

Massive Obstetric Haemorrhage protocol activation and peri-mortem section Transfer to theatre to complete section.

Understand the nature of uterine rupture management in a patient who is of low body weight and impact on circulating blood volume

## REFERENCES

RCOG Green-top Guideline Antepartum Haemorrhage No. 63 Nov 2011
RCOG Green-top Guideline Maternal Collapse in Pregnancy and the Puerperium No. 56 Jan 2011