# 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

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noelle/ Baby Hal</td>
<td>Peri-mortem LSCS kit</td>
</tr>
<tr>
<td>Arrest trolley</td>
<td>Blood Bottles/request forms</td>
</tr>
<tr>
<td>Fluids / giving sets</td>
<td>Phone</td>
</tr>
<tr>
<td>Monitor for manikin</td>
<td>Neonatal Resus Bag</td>
</tr>
</tbody>
</table>

# PERSONNEL

<table>
<thead>
<tr>
<th>Role</th>
<th>Minimum</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obstetrics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Anaesthetics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Paeds</td>
<td>1-2</td>
<td></td>
</tr>
<tr>
<td>Midwives</td>
<td>1-2</td>
<td></td>
</tr>
</tbody>
</table>

# FACULTY

<table>
<thead>
<tr>
<th>Role</th>
<th>Minimum</th>
<th>Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitator (act as first MW)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Observer x2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debrief Lead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scribe</td>
<td></td>
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</tbody>
</table>

# TIME REQUIREMENTS

TOTAL 1.5 hours

- Set up: 30 mins
- Simulation: 20 mins
- Pre Brief: 10 mins
- Debrief: 30 mins
INFORMATION TO CANDIDATE

PATIENT DETAILS
Name: Anita Singh
Phx: Gestational Diabetes
Age: 40yrs
Allergies: nil
Weight/BMI: 55kg/24
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

Developing people for health and healthcare
www.hee.nhs.uk
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/Aaesthetic Consultants are informed to attend
(STAGE 1) assist ventilation, IV aces, 1L Hartmanns stat, vasopressors, left lateral
Consider differential dianosis? Amniotic fluid embolism, pulmonary embolism, air embolism.
Decison 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
Adress 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

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

REFERENCES

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