SCENARIO

Maternal Collapse- AMI

LEARNING OBJECTIVES

Management of Maternal Collapse- ABCDE Approach

List differential diagnosis in obstetric patient

Be aware of acute management of AMI

Communication with SBAR

EQUIPMENT LIST

Noelle/ SimMom	Arrest trolley
Fluids / giving sets	GA drug box for T/F to theatre
Fake hand held notes	IVC packs/Blood Bottles
ODP grab bag	Monitor for manikin
ECG/ downloaded image	

PERSONNEL	FACULTY
MINIMUM: 5	MINIMUM: 3
ROLES:	Facilitator
Obstetric Junior/Reg	Observer
Midwife	Debrief Lead
Anaesthetic Reg/Cons	
Obstetric Consultant	

TIME REQUIRMENTS
TOTAL 1.5hours

Set up:	30 mins	Simulation:	15mins
Pre Brief:	10 mins	Debrief:	30mins

INFORMATION TO CANDIDATE

PATIENT DETAILS

Name:	Monika Lisowski	Phx: GORD
Age:	40	Allergies: Nil
Weight/BMI:	90kg/38	Smoker 30/day
	G5 P4	34 weeks / IUGR

SCENARIO BACKGROUND

Location: Triage

Situation: Monika has presented to triage with constant indigestion like chest pain for the past 2 hours but now feels unwell, dizzy and has vomited. She is found to be pale, hypotensive and tachycardic. The fetus has sustained a bradycardia of 90 that has not recovered yet.

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 Monika Lisowski. You are 40 years old. You are currently 34 weeks in to your 5th pregnancy. You have previously had 4 normal deliveries, sadly you last child was delivered still born. This baby is being monitored with growth scans as it is small. You smoke over 30 cigarettes a day. You have known reflux disease and prior to this pregnancy you were taking lansoprazole. You have attended the hospital today as your usual indigestion is much worse. The pain has been constant for the past 2 hours. You feel it most in your central chest.

Whilst awaiting the doctor's review you start to feel unwell, dizzy and you vomit. Eventually you collapse.

RESPONSES TO QUESTIONS

Initially can answer as above but then as you become more unwell you can only manage moaning noises until you become unresponsive.

INFORMATION TO FACILITATOR

SCENARIO DIRECTION

Assessment	STAGE 1
Cardiac arrest VF	STAGE 2
Perimortem section	STAGE 3

A: Maintained
B: AE equal fine bibasal inspiratory crepitations (See obs below)
C: Pale
D: Responds to voice pupils equal and reactive
E: Mottled peripheries

Lying semi recumbent, fetal heart 70bpm
Wedge L lateral tilt
Establish ECG monitoring, BP, P, Sp02, RR
IV access and fluid bolus
Support BP (phenylepherine bolus)

Patient stops breathing and arrests

Interventions

VF
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) Airway maneuvers and Guedel,
Connect defibrillation pads give1st shock
BVM assist respiration,
Intubate, cricoid, ventilate (ETCO2)
After 2 minutes reassess
VF Give 2nd shock
Continue CPR with uterine displacement
Prepare for perimortem LSCS around 5 minutes
Exclude likely reversible causes: 4Hs & 4 T's
After 2 minutes reassess
VF give 3rd shock
Perform Perimortem section
Continue CRP 2 minutes
Give adrenaline 1mg and amioderone 300mg
After 2 minutes reassess

ROSC Return of spontaneous circulation (RCOS) after perimortem section
STachy Check monitor and rhythm
Reassess ABCDE
Move to OT to complete section and stabilise

Stabilisation: Ventilation, inotropes, invasive monitoring
Post resuscitation investigations: =>
12 lead ECG shows anterior STEMI
bloods, bedside Echo
Urgent cardiology review? PCI/angiography

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

Transfer to ITU SBAR
End

SCENARIO OBSERVATIONS/ RESULTS

	BASELINE In triage	STAGE 1 Initial Assessment	STAGE 2 VF Arrest	STAGE 3 Post Perimortem section	
RR	16	28	4 gasps	18 ETT	
chest sound	Bibasal fine insp creps	Bibasal fine insp creps	nil	Bibasal creps	
SpO2	96%	94%	unrecordable	98%	
HR	130	140	VF	110	
Heart sound	Sinus tachy	Sinus Tachy	VF	tachy	
BP	70/40	65/40	Not recordable	80/50	
Temp	36.6	36.5	36.4	35.5	
Central CRT	4 secs	5 secs	>6 secs	4 secs	
GCS/AVPU	V	V	U	U	

SCENARIO DEBRIEF

TOPICS TO DISCUSS

Management of cardiac arrest in an obstetric patient
  Differences to non -obstetric adult
  Uterine displacement

Review of ALS algorithm / RCOG version

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

Risk factors for ACS is pregnancy – same as non-pregnant

Management of ACS in pregnancy
  atypical presentations,
  Alternative pathology i.e. coronary artery dissection.

REFERENCES

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

Nelson-Piercy, C., Adamson, D., & Knight, M. (2012). Acute coronary syndrome in pregnancy: A time to act. *Heart,* 98(10), 760-761