‘Together Everyone Achieves More: Team in Maternity Care’ – Eclamptic Fit

<table>
<thead>
<tr>
<th>Course lead</th>
<th>Hannah Rogers / Danielle Nixon</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course / Curriculum</td>
<td></td>
<td>Newly qualified Nurses F1&amp;F2</td>
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<tr>
<td>Scenario name</td>
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<td>Group Size 12</td>
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Patients Name: Sonia Phillips  
Patients Age: 23 yo

Major Problem

- Medical  
- Eclamptic fit with additional potential differential diagnosis of ruptured uterus, concealed placental abruption

Suggested NTS / Technical

- Call for help
- Planning
- Decision making
- Team working
- Communication

Learning Goal

- Medical / Clinical  
- Management of a high risk case with minimal information and differential diagnosis

Narrative Description

**ACUTE:** 23 yo Sonia has been out with her partner, she collapsed but it is uncertain if it was a fit or faint. An ambulance has bought her to the hospital. She is un-booked at this Trust but has had care at another hospital. However she has no records with her, her partner Greg tells the staff Sonia is 8 months pregnant, it is her second pregnancy and that her last baby was born by emergency CS 18 months ago.

When reviewed by the team Sonia is contracting strongly 3-4 in 10 this is making it difficult for Sonia to communicate, her partner is flustered and vague, he thinks he witnessed a fit but is not sure. Sonia is distressed, complaining of abdo pain and contractions. (See Obs chart for details). The CTG is suspicious. If a VE is performed she is 7cm. Sonia is unable to pass urine. At this stage the diagnosis could be:

- PET
- Ruptured uterus
- Concealed placental abruption

When reviewed by the team Sonia is contracting strongly 3-4 in 10 this is making it difficult for Sonia to communicate, her partner is flustered and vague, he thinks he witnessed a fit but is not sure. Sonia is distressed, complaining of abdo pain and contractions. (See Obs chart for details). The CTG is suspicious. If a VE is performed she is 7cm. Sonia is unable to pass urine. At this stage the diagnosis could be:
Precipitate birth  
Over-extended bladder

We envisage the candidates to commence the PET protocol, and commence Intrapartum care. If a CS or epidural is offered Sonia will decline (too distress to comprehend these options)

After roughly 10-15 minutes into the scenario Sonia starts to push and gives birth to a baby in good condition. Post birth her BP remains high and she complains of a severe headache

**Past medical history:**

**Drug history:**

**Allergies:**

**Social history:**

| Staffing          | Faculty Control Room:  
|                  | 1 x technician  
|                  | 1 x patient voice  
|                  | 1 x debriefer  
| Faculty Role Players: | 1 x MSW  
|                  | 1 (2) x ambulance crew)  
| Candidates       | 1 x Anaesthetic SpR  
|                  | 2 x Midwife  
|                  | 1 x theatre nurse or HDU midwife  
|                  | 2 x Obstetric doctors  
|                  | 1 x MSW |

**Case Briefing**

To first midwife: Sonia has arrived by ambulance with her partner following a faint. Sonia isn’t booked at this hospital. If possible, the ambulance crew hand over to the midwife. The ambulance crew have inserted a cannula.

To Role Players Novice NA, allocated to care for patient and report upwards when patient becomes more breathless – understand importance of observations and their recording.

**OPD/community-Assistant in healthcare centre or OPD**

**Manikin preparation**

Noelle (cephalic presentation) prepared to give birth at the end of the scenario.

Name Band

CTG monitoring ready (with a CTG normal baseline and reduced variability)

IV access

**Room set up**

Location: HBC

Patient on birth bed

CTG

Usual birthing equipment
<table>
<thead>
<tr>
<th>Simulator operation</th>
<th>Hypertensive, tachycardia, see below for observation, contracting regularly. Vaginal birth cephalic presentation</th>
</tr>
</thead>
</table>
| Props needed        | Ambulance handover report  
                      | 2 x large bore cannulae  
                      | Non-rebreathe Oxygen mask  
                      | Resus trolley  
                      | CTG machine  
                      | Observation monitoring – BP machine, pulse oximeter, thermometer, ECG  
                      | Syringe driver with giving set and 50ml syringe. MgSO4, normal saline ampules. Sytoncinon ampules  
                      | Trolley  
                      | Consent forms  
                      | Delivery Pack  
                      | Towels  
                      | ID band  
                      | Maternity Notes  
                      | FBS kit  
                      | Hospital guidelines (eclampsia) – for faculty |
| Notes to faculty    | The underlying cause is an acute exacerbation of COPD. The purpose of the scenario is to reinforce ABCDE assessment and early recognition of a deteriorating adult patient. Delegates are expected to use an early warning score system and initiate necessary interventions such as emergency oxygen therapy. They are expected to call for help early utilising a handover tool such as SBAR/SPAR. The scenario will end with arrival of help, either a senior nurse or doctor and a structured handover. |
Observations:

Initial (manikin setup)

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See CTG FH information

Next set of Obs

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Next set of Obs

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During Fit

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IPE Combined SIM. Scenario 1 COPD page 4 of 12
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<td>CTG (if applied)</td>
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**Post birth**

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Patient Role

Scenario
You are a 79 year old man who has become increasingly SOB on the ward talking in single words only.
If asked, you have not passed urine today but did yesterday.

After a period of increased breathlessness, you become tired, respiration rate drops and you are less responsive/ unresponsive.

You prefer to be called Tony and hope that the doctors can sort you out quickly as you want to get back to your racing pigeons – you have been a racer for many years and love to bet on them.

Underlying diagnosis
Acute exacerbation of COPD

Past medical history: COPD previous episode of ventilation on intensive care for 4 weeks, 2 x myocardial infarctions, coronary artery disease (CAD), Peptic ulcer disease.
Allergies: nil known
Social history: Ex smoker (gave up a week ago), no alcohol
NA Role (Plant)

Scenario
79 year old man is on a general ward (or OPD/ visiting community health centre). He is known to have COPD and has home oxygen and nebs. The NA’s have been caring for him, but over the course of the morning he has become more SOB, is tiring and is now only able to speak occasional words.

Underlying diagnosis
Acute exacerbation of COPD

Past medical history
COPD previous episode of ventilation on intensive care for 4 weeks, 2 x myocardial infarctions, coronary artery disease (CAD), Peptic ulcer disease.


Allergies: nil known

Social history: Ex smoker (gave up a week ago), no alcohol

Instructions
You are an inexperienced nursing assistant – new to the ward/ OPD or health centre and don’t know where things are but you are very helpful.
Medical Role – if called

Scenario
Tony Thomas is a 79 year old man on a general ward. He is known to have COPD and has home oxygen and nebs. The NA’s have been caring for him, but over the course of the morning he has become more SOB, is tiring and is now only able to speak occasional words.

Underlying diagnosis
Acute exacerbation of COPD

Past medical history
COPD previous episode of ventilation on intensive care for 4 weeks, 2 x myocardial infarctions, coronary artery disease (CAD), Peptic ulcer disease.

Drug history:
- Home oxygen-2 litres (Patient normally saturates 91-92%),
- Home nebulisers- Ipratroprium Bromide & Sabutamol, Uniphylline, Frusemide, Nifedipine, GTN spray, Omeprazole.

Allergies: nil known

Social history:
- Ex smoker (gave up a week ago), no alcohol

Instructions
Check: has assessment of exacerbation severity been complete: (there is a full check list on Guys and St Thomas’ Clinical Guidance)
- Respiratory rate,
- cyanosis,
- use of accessory muscles,
- oxygen requirement,
- confusion (hypercapnia?) or hypoxia (perform arterial blood gases if SaO2 <90% or adverse clinical features)
- History – normal SPo2 on air/ usual level on oxygen

You are not keen to intubate the patient but want to consider Non invasive ventilation.

Community setting: – GP advice: keen for him to be stabilised / admitted but not intubated as recent history of exacerbation and continues to smoke.

He may benefit from a referral to the Integrated Respiratory Team (IRT) for a review and educational assessment – the IRT can instigate the COPD Care bundle and issue a COPD action plan and rescue pack for home once things
Patients’ Daughter/son Role
(Plant can come in to develop the scenario or be on phone)

Scenario
79 year old man is brought in by ambulance from home. He known to have COPD and has home oxygen and nebs. He has recently become more SOB and is now only able to speak occasional words.

Underlying diagnosis
AECOPD

Instructions
You are very anxious for your father. He lives at home alone with full social service support and you live nearby and visit regularly.
You think not enough is being done for your father and push for them to intubate him like they did last time

Past medical history
COPD previous episode of ventilation on intensive care for 4 weeks, 2 x myocardial infarctions, coronary artery disease (CAD), Peptic ulcer disease.

Allergies: nil known

Social history: Ex smoker (gave up a week ago), no alcohol
Results of Investigations

Bloods:
None available

Gases:

1st ABG on 2 litres
pH 7.221
pCO2 14
pO2 6.30
HCO3 30.4
BE -3

2nd ABG post nebulisers
pH 7.321
pCO2 6.83
pO2 8.81
HCO3 24.4
BE 1.4

Imaging:
Chest xray

Other:
Not available
Learning Cue Card for Transition:
Adapted from the IRT SOP (Sept 2014):

Signpost to clinical guidelines on GTI – AECOPD & Self management guide with referral to IRT

What is it COPD?
C= chronic, meaning that it will always be there.
O= obstructive, meaning there is narrowing of the airways.
P= pulmonary, meaning it is about the lungs and this may be inflammation of the airways or damage to the smaller airways and air sacs of the lungs.
D= disease, meaning a medical condition, in this case that is not infective, where the lungs don’t work as well as they should.

What has caused COPD?
The most common cause of COPD is smoking which irritates the airways over the years. Chronic bronchitis or emphysema can cause obstruction (narrowing) of the airways.

How will COPD affect the patient?
This can include physical, emotional and psychological aspects.
The symptoms of COPD may include any or all of the following:
- chronic cough with production of sputum
- breathlessness: difficulty in breathing both in and out, which increases as COPD becomes progressively more severe
- audible wheeze and chest tightness

COPD can lead to feelings of anxiety because of breathlessness.
People with COPD may reduce their activities to avoid becoming breathless. But by reducing activity levels they can become less fit and therefore get breathless even sooner when they try to do any activity.

Can it be controlled or cured?
No cure for COPD but aim to relieve the symptoms. This includes:

- Stopping smoking - will help improve coughing and phlegm. It will also slow down the decline in lung function and improve blood oxygen levels. COPD smokers who wish to quit should be referred to Stop Smoking service via EPR
- Bronchodilators - if the main symptom is breathlessness then the patient may benefit from a bronchodilator
- Nebulisers - can provide higher doses of bronchodilators but inhalers with a spacer can be just as effective.
- Steroids - during a flare-ups – often sudden increase in SOB and worsening of symptoms. A course of steroids for at least seven days may be required.
- Antibiotics - if the patient’s phlegm changes colour, becomes stickier, or volume of production increases, a course of antibiotics may be required.
- Flu vaccination - every autumn to help prevent flare-ups.
- Diet - balanced diet and to keep as mobile as possible to help manage weight

Controlled (Acute) Oxygen Therapy

Oxygen must be prescribed on the in-patient prescription chart.

Oxygen must NOT be administered without a prescription except where the Trust guideline permits.
Following local expert discussion we advise 88-92% as the target saturation range for all patients with AECOPD.

The aim of oxygen therapy is adequate oxygenation (P O₂ >8.0 kPa, or S O₂ 88%-92%) without causing a respiratory acidosis (defined as pH<7.35 and P a CO₂ >6.5).

Venturi masks (set to deliver 24%, 28%, 40% and 60% oxygen at specific flow rates) should be used if the PCO₂ is raised. However nasal prongs are better tolerated.

Approximation for delivery is:
- 1L/min is approximately 24%,
- 2L/min is approximately 28%,
- 4L/min is >30%.

In patients with P a CO₂ >6.5kPa start with 24% O₂ and titrate to S a O₂ 88-92%.

Saturations should be carefully monitored 15 minutes after a change in inspired oxygen concentration.