Assessment and Management of Obstetric Emergencies Online Course



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Learning Outcomes

At the completion of the program participants should be able to:

- 1. Discriminate the differential diagnosis and management of PV bleeding in early pregnancy
- 2. Structure the ED clinical assessment of the Pregnant Patient
- 3. Prioritise the clinical presentation and immediate management of the patient with severe preeclampsia or eclampsia
- 4. Differentiate the differential diagnosis and management of PV bleeding in late pregnancy
- 5. Structure the emergency management of labour and delivery
- 6. Outline the clinical presentation and emergency management of postpartum haemorrhage
- 7. Prioritise the emergency management of the newborn requiring resuscitation

Summary of the e-Learning Program

The e-learning is interactive and requires the clinician to consider a range of the clinical problems and scenarios and provide a response. At the end of each topic a summative quiz is used to evaluate learning and understanding of the topic material. There are five topics with a total course time of 6.5 hours.

The five topics are:

- 1. First Trimester Bleeding
- 2. ED Assessment and Management of Pre-Eclampsia / Eclampsia
- 3. Assessment and Management PV Bleeding in Late Pregnancy and PPROM
- 4. Managing Delivery in the Emergency Department
- 5. Managing the Patient with Post Partum Haemorhage
- 6. Newborn Resuscitation

Outline of the Program

1. First Trimester Bleeding (60 mins)

Module Summary: Bleeding and / or pelvic pain in the first trimester is a common acute presentation in the pregnant patient. In most patients the symptom will be the result of a threatened or complete miscarriage. A cautious approach however should be routinely applied to the assessment of patients with first trimester bleeding aiming first to rule out the major life threats including ectopic pregnancy, septic abortion and incomplete miscarriage.

Interaction/Assessment:

- Chapter Reading: ABCDs of Emergency Medicine PV Bleeding in First Trimester Pregnancy
- Interactive Clinical Casebook: PV Bleeding in Early Pregnancy
- Topic Quiz: PV Bleeding in Early Pregnancy

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Early Pregnancy Complications
- Bleeding and Pain in Early Pregnancy: SA Perinatal Practice Guidelines
- Miscarriage Management Guideline: Royal Women's Hospital Victoria

2. Pre-Eclampsia / Eclampsia (60 mins)

Module summary: Although patients > 20 weeks presenting with pregnancy related presentations will frequently be referred on for obstetric review a knowledge of the presentation and management of the important complications of late pregnancy is an essential skill for health professionals working in acute care. This module explores the case of a patient who presents with pre-eclampsia, a complication that requires early diagnosis and intervention.

Interaction/Assessment:

- Chapter Readings: ABCDs of Emergency Medicine Pre-eclampsia and Eclampsia
- Interactive Clinical Casebook: Pre-eclampsia/Eclampsia
- Topic Quiz: Pre-eclampsia / Eclampsia

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Late Pregnancy Complications
- Hypertensive Disorders in Pregnancy: SA Perinatal Practice Guidelines
- Magnesium Infusion in Pre-Eclampsia/Eclampsia: SA Perinatal Practice Guidelines
- Labetolol and Hydralazine in Severe Pre-Eclampsia/Eclampsia: SA Perinatal Practice Guideline
- Summary Guideline: Pre-Eclampsia (Safer Care Victoria)
- Summary Guideline: Eclampsia (Safer Care Victoria)

3. PV Bleeding in Late Pregnancy (APH) and PPROM (60 mins)

Module summary: Serious complications in late pregnancy that require early diagnosis and intervention include antepartum haemorrhage (APH), preterm prelabour rupture of membranes (PPROM), eclampsia/severe preeclampsia, preterm labour and umbilical cord prolapse. In the reading we will examine Antepartum Haemorrhage, PPROM, Preterm labour and Amniotic Fluid Embolus. The Case Simulation considers a clinical case of PV bleeding in late pregnancy and identifies the immediate priorities in ED assessment and resuscitation, differential diagnosis, role of investigations, ED management and disposition.

Interaction/Assessment:

- Chapter Reading: ABCDs of Emergency Medicine Antepartum Haemorrhage and PPROM
- Interactive Clinical Casebook: PV Bleeding in Late Pregnancy (APH)
- Topic Quiz: Bleeding in Late Pregnancy (APH) and PPROM

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Late Pregnancy Complications
- Antepartum Haemorrhage: SA Perinatal Practice Guidelines
- Summary Guideline: Antepartum Haemorrhage (Safe Care Victoria)
- PROM > 36 weeks: SA Perinatal Practice Guideline
- Summary Guideline: PPROM at Term (Safe Care Victoria)
- Summary Guideline: PPROM between 34-36 weeks (Safer Care Victoria)

4. Emergency Delivery (60 mins)

Module summary: Imminent delivery is a scenario few in the emergency department are experienced with. Although there is a lot of anxiety with this, most of the time the baby will deliver with minimal assistance. In this module we focus on the management of a normal delivery and the immediate after delivery care of the mother and baby. The module reviews the stages of labour, care of a woman in labour, immediate management of the newborn and management of third stage of labour.

Interaction/Assessment:

- Chapter Reading: ABCDs of Emergency Medicine Labour and Delivery
- Interactive Clinical Casebook: Emergency Delivery
- Topic Quiz: Emergency Delivery

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Labour and Delivery including PPH
- Shoulder Dystocia: SA Perinatal Practice Guidelines
- Shoulder Dystocia: Royal Womens Hospital Guideline (Victoria)

5. Managing the Patient with Post Partum Haemorhage (60 mins)

Module summary: Postpartum haemorrhage is the most common complication of labour and delivery and results in blood loss that may lead to the patient to becoming haemodynamically unstable. PPH is defined as blood loss of 500 mls or more during and after childbirth. The causes of Post Partum Haemorrhage may be remembered by the mnemonic 4 Ts - Tone, Tissue, Trauma and Thrombin. The clinical picture is one of developing haemorrhagic shock and requires immediate treatment.

Interaction/Assessment:

- Chapter reading: ABCDs of Emergency Medicine Post Partum Haemorrhage
- Interactive Clinical Casebook: Post Partum Haemorrhage
- Topic Quiz: Post Partum Haemorrhage

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Labour and Delivery including PPH
- Summary Guideline: Primary Postpartum Haemorrhage (Safer Care Victoria)
- Summary Guideline: Secondary Postpartum Haemorrhage (Safe Care Victoria)

6. Newborn Resuscitation (60 mins)

Module summary: Approximately 10% of all newborns require some form of "resuscitation" immediately after birth. As time is critical after birth of a child it is important to be able to recognise the infant requiring urgent resuscitation and be familiar with the steps in resuscitation. The following module examines the current guidelines for resuscitation of the newborn.

Interaction/Assessment:

- Chapter reading: ABCDs of Emergency Medicine Resuscitation of the Newborn
- Interactive Clinical Casebook: Newborn Resuscitation
- Topic Quiz: Newborn Resuscitation

Clinical Resources/Further Reading

- ABCDs of Emergency Medicine: Newbord Resuscitation
- Clinical Management Summary: Newborn Resuscitation
- ARC Newbord Resuscitation Guideline

7. Final Post Course Assessment Quiz (30 mins)

Final Course Quiz – ABCDs of Obstetric Emergencies (Summative assessment: 30 mins)