

**Aims:**

Describe the initial management and triage of medical emergencies specific to pregnancy

Background:

The HEMS team may be called to deal with critically unwell pregnant patients. This SOP refers to a number of medical conditions specific to pregnancy. It should be read in conjunction with the 'Trauma in Pregnancy SOP'. General acute medical conditions not specifically related to pregnancy (such as asthma or PE) should be managed according to the relevant SOP or locally-agreed guidelines.

In general, pregnancy-related presentations can be split into three categories:

1. PV bleeding
2. Abdominal pain
3. Systemic complications of pregnancy

It is unlikely that HEMS will be called to attend pregnant patients with abdominal pain unless they are in a remote location and rapid transport to hospital is required. Shocked patients with catastrophic PV bleeding, or patients with eclampsia are more likely to generate a HEMS response. This SOP relates to these two situations.

Policy:

PV Bleeding

PV bleeding (and shock) prior to 20 weeks gestation should be considered to be ectopic pregnancy until proven otherwise. PV bleeding (and shock) after 20 weeks gestation is more likely to be placental abruption or placenta praevia. Bleeding may be apparent or concealed.

Assessment of the stage of pregnancy

- Ask the patient, family, or find the information in the patient's 'red book' that records antenatal medical information
- Estimate the stage of pregnancy clinically; the distance in centimetres between the pubic symphysis and the superior border of the palpable uterus is roughly equivalent to the gestation in weeks. Alternatively, in general, the superior border of the palpable uterus reaches the umbilicus by 20 weeks, the epigastrium by 36 weeks, and lies half way between the two by 28 weeks
- PV examination should not be performed in the acute pre-hospital setting. There is often little extra relevant information to obtain, and the process could provoke massive haemorrhage

Venous access and fluid resuscitation (suspected haemorrhagic shock)

- Intravenous access should be secured but should not delay transport to hospital (consider cannulation en route to hospital if transporting by land)
- Infuse 250ml boluses of crystalloid to achieve verbal contact which is taken to indicate adequate cerebral perfusion. The absence of a radial pulse should also prompt consideration of intravenous fluid administration
- Where verbal contact is not achievable (unconscious / ventilated patient) – infuse 250ml boluses of crystalloid to achieve systolic blood pressure of 80mmHg.
- Where patients demonstrate signs of haemodynamic compromise, the receiving Emergency Department should be informed during the pre-alert call, and consideration given to requesting that blood and clotting factors be made available. With blood available the decision to transfuse or not can be made by the receiving team

Triage and mode of transport

- All patients with heavy PV bleeding or shock from suspected concealed haemorrhage require urgent and rapid transport to the nearest appropriate Emergency Department (in this setting, this will usually be a hospital with obstetrics and gynaecology services on site)
- The mode of transport chosen will depend on the clinical state of the patient and the geographical location of the incident. In general, the mode of transport that provides quickest access to the most appropriate Emergency Department should be chosen

Eclampsia

Clinical assessment

- Ask any available friends or family about a history of headache, drowsiness, visual disturbances, vomiting, ankle swelling or abdominal pain
- The pregnant patient who presents with seizures has eclampsia – remember that eclampsia occurs in the two weeks post-partum about half of the time

Specific treatment

- The general management of a fitting patient should be according to the 'Seizures and Status Epilepticus' SOP. Eclamptic seizures are notoriously difficult to terminate
- In addition to standard treatment, intravenous magnesium sulphate should be administered according to local formulary

Triage and mode of transport

- All patients with suspected pre-eclampsia or eclampsia require urgent and rapid transport to the nearest appropriate Emergency Department (in this setting, this will usually be a hospital with obstetrics and gynaecology services on site, as well as a general intensive care unit)
- The mode of transport chosen will depend on the clinical state of the patient and the geographical location of the incident. In general, the mode of transport that provides quickest access to the most appropriate Emergency Department should be chosen

- Consideration should be given to controlling the airway with RSI and pre-hospital anaesthetic prior to transfer. This should be discussed with the pre-hospital care consultant