LONDON'S AIR AMBULANCE
roadside intensive care

Pre-hospital Care Standard Operating Procedure

Pelvic Splintage

REVIEW:	May 2010	
APPROVAL/ ADOPTED:	PHC Policy Board	
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Aims:

- Define indication for use.
- Describe application of pelvic splint.

Background:

The pelvic splint has been in use by this service for many years. Several commercial splints are now available and we have chosen one which is simple to apply. It is up to the team who put it on to ensure that it is not removed prematurely and that those at the receiving unit are aware of the function of the pelvic splint. The function of the splint is to decrease the volume of the disrupted pelvis and promote haemostasis by splinting fractured bones. It also acts as a reminder not to move or roll the patient as this will dislodge blood clots and promote bleeding.

Policy:

1. Indications

Obvious or potential pelvic disruption – see below for clinical evaluation of the pelvis.

2. Application

- In patients with suspected pelvic injury, moving and rolling the patient should be kept to an absolute minimum.
- The splint should be applied to skin, not over clothing.
- If the patient is found supine the belt should be applied after the clothes are cut up their sides and before rolling takes place to position the scoop. The pelvis should be lifted just enough to slide the splint in a cephalic direction under the patient's buttocks. In other situations the patient should be rolled on to the splint, laid out on the orthopaedic scoop stretcher, thus reducing rolling movements which may disrupt clot formation.
- Positioning is important as a badly positioned belt may serve to open the pelvis. The pre-application position of the ASIS and iliac crest should be identified and the belt

should aim to bring them back into an anatomical position. The belt is secured using the Velcro straps. The endpoint of the splint is to bring the pelvic bones into a near anatomical position.

- The straps do not need to be tightened until a ‘click’ as this may apply too much tension. Estimated normal alignment is the end point of tightening.
- For *paediatric* use, HEMS carry a wide strap which is closed with Velcro.

3. Removal

- The splint should only be removed when other means of stabilisation / splintage can be initiated or after full radiological imaging excludes instability. (Imaging should be performed through the splint)

4. Clinical evaluation of the pelvis

- Injured patients complaining of pain in the pelvis, lower back or hips should be considered as having an unstable pelvic injury. Vertical shear and open book fractures can often be identified by looking for pelvic asymmetry. Do not stress the pelvis to assess it. This manoeuvre is counter productive and simply serves to dislodge blood clots, promote blood loss and may enhance cytokine release.

NB: Patients may not be able to give a history: If mechanism of injury suggests a fracture – *treat* for one.