Clinical Practice Procedures:
Trauma/Orthopaedic splinting – Prometheus pelvic

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<tr>
<th>Policy code</th>
<th>CPP_TR_OSPP_0119</th>
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<tr>
<td>Date</td>
<td>January, 2019</td>
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<td>Purpose</td>
<td>To ensure a consistent procedural approach to orthopaedic splinting – Prometheus pelvic.</td>
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<td>Scope</td>
<td>Applies to Queensland Ambulance Service (QAS) clinical staff.</td>
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<td>Health care setting</td>
<td>Pre-hospital assessment and treatment.</td>
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<td>Population</td>
<td>Applies to all ages unless stated otherwise.</td>
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<tr>
<td>Source of funding</td>
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<tr>
<td>Author</td>
<td>Clinical Quality &amp; Patient Safety Unit, QAS</td>
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Orthopaedic splinting – Prometheus pelvic

The early and appropriate application of a pelvic circumferential compression device (PCCD) can be lifesaving. Benefits include decreased mortality, haemorrhage control, reduced transfusion requirement, fracture stabilisation, length of stay in hospital and analgesia.[1]

**Indications**

Mechanism of injury suggestive of pelvic fracture(s) with any of the following criteria:
- Haemodynamic compromise (HR > 100 OR SBP < 90 mmHg)
- GCS < 13
- Distracting injury
- Abnormal clinical assessment of the pelvis with high likelihood of fracture.

**Contraindications**

Suspected isolated:
- Neck of femur fracture; or
- Hip dislocation

**Complications**

- Pressure areas
- Tissue necrosis

The Prometheus Pelvic Splint is a latex free, single patient use immobilisation device designed to fit all patients from the infant to the bariatric adult. It is indicated for the emergency management of suspected pelvic fractures(s).
1. Position the patient supine.
2. Ensure all clothing is removed. The device should be applied to the skin.
3. Identify the patient’s greater trochanters by gentle palpation. If unable to palpate the greater trochanters use the pubic symphysis as an approximate transverse landmark.
4. Fold the neoprene band in half with the ‘fuzzy yellow’ on the outside.
5. Place the folded band against the patient with the centre of the band in line with the greater trochanter.
6. Fold the top half of the band down to lie beside the patient’s leg.
7. Perform a minimal movement roll to pass the band underneath the patient to the midline.
8. Gently roll the patient back to retrieve the folded band.
9. Ensure the centre of the band is still aligned with the greater trochanter.

10. Wrap the neoprene band around the patient.

11. Attach the blue securing triangles to the outer surface of the neoprene band ensuring that the triangles are located centrally over the greater trochanter.

12. Cut the excess neoprene at the level indicated on the securing triangles. This will allow greater access to the inguinal region.
13. Repeat steps 10–13 on the other side.

14. Ensure the buckle is central and apply tension to the two blue adjustment straps simultaneously until sufficient force has been applied to stabilise the pelvis.

15. Secure the blue adjustment straps to the neoprene band to maintain desired tension.

**Additional information**

- In cases of suspected pelvic fracture(s) where the application of the PCCD is not currently indicated, the binder is to be positioned flat under the patient in readiness for rapid application.
- Patients with concurrent suspected or previous femoral fractures should have traction splint(s) applied also.
- There is evidence that log rolling patients with pelvic fractures can cause clot disruption and further haemodynamic compromise. Minimum movement log rolls should be used at all times during PCCD application to preserve clot formation.