Blunt trauma in adult with clinical suspicion of pelvic fracture

AP pelvic radiograph, +/- FAST

FAST +ve or suspected intra-abdominal injury

Haemodynamically unstable (despite mechanical stabilisation)
- External fixation
- Preperitoneal packing
- Pelvic angiogram +/- embolization

Stabilize
- CT pelvis +/- abdomen

Unstable pelvic fracture
- CT pelvis +/- abdomen
- Surgery and fixation
- +/- Pelvic angiogram & embolization

Stable pelvic fracture
- Observation
- +/- CT pelvis
- +/- Pelvic angiogram & embolization

Haemodynamically stable

Please refer to guideline on blunt abdominal trauma in adult (GI 1)
REMARKS

1 General
   1.1 The clinical management of pelvic trauma is dependent on the haemodynamic status and the amount of blood loss.
   1.2 Concomitant major trauma to other sites has to be excluded in significant pelvic trauma.
   1.3 Unstable fracture includes rotationally unstable or vertically unstable fractures, please refer to Young and Burgess Classification.13

2 Plain radiograph
   2.1 Anterior-posterior (AP) radiograph of the pelvis is recommended in patients with high clinical suspicion of pelvic fracture.
   2.2 Additional images, such as pelvic inlet or outlet views, need not be obtained in acute phase of injury.
   2.3 Plain radiograph can underestimate the extent of bony injury and fracture pattern on plain radiograph does not predict haemorrhage or the need for angiography.

3 CT
   3.1 CT pelvis is required for haemodynamically stable patients with high-energy pelvic injuries or disruption of pelvic ring.
   3.2 CT is useful in pre-operative planning of pelvic, sacral and acetabular fractures. 2- and 3-dimensional reformats are useful in selected cases.
   3.3 CT abdomen and pelvis should be done if intra-abdominal and pelvic injuries are suspected.

4 Angiography
   4.1 Angiography with pelvic embolization is useful in patients with pelvic fractures who are haemodynamically unstable.
   4.2 Patients with evidence of contrast extravasation in pelvis on CT may require pelvic angiography and embolization regardless of haemodynamic status.

REFERENCES