

Acetabular Fixation Treatment with the Curvafix® IM System

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CASE PRESENTATION

A 28-year-old male complained of left hip pain after a motor vehicle accident. There were no other significant injuries to be addressed.

DIAGNOSIS

AP pelvis x-ray showed left hip fracture dislocation. Computed tomography (CT) confirmed a transverse posterior wall fracture pattern with a very comminuted posterior wall and some osteochondral fragments in the joint. The transverse component of the fracture was not significantly displaced.

PREPARATION

The patient was placed prone on a Jackson spinal table and the case proceeded with a Kocher-Langenbeck approach. A large femoral distractor was used to enable removal of the osteochondral fragments in the joint (after which the transverse fracture was well aligned) and the hip was reduced. An angled jaw clamp was used to reduce and hold the anterior column component of the fracture.

FIXATION

Using the implant technique, a curved tunnel was made down the anterior column across the reduced transverse fracture.

The CurvaFix IM Implant (110 mm in length) was inserted with the clamp in place to maintain the reduction until the implant was in its final position and locked.

ACUTE RESULTS

The CurvaFix IM Implant (110 mm in length) was seated into the countersunk area of the ilium, curved posterior to anterior, and had some purchase from the distal cancellous threads. The case was completed with standard open reduction and plating to address other aspects of the injury.

FOLLOW-UP

At 10 weeks, the patient was weight bearing as tolerated, had full range of motion, no complaints, and no pain.

KEY POINTS

- Strong anterior column fixation from a posterior approach in the prone position is difficult to achieve using other methods.
- The use of a curved implant offers more flexibility on the starting point/trajectory than would be possible for a straight screw.
- The curved implant follows the curved bony corridor and maintains the reduction when locked.
- The steerable guidewire and reamers give tactile feedback and consequent confirmation of containment within the safe osseous pathway.



Left hip fracture dislocation



10-week follow-up