

Polytrauma

Treatment with the CurvaFix® IM System

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CASE PRESENTATION

A 50-year-old male with no significant medical history fell approximately 10 feet off a roof and sustained a left nondisplaced zone 1 vertical sacral fracture and a left nondisplaced pubo-acetabular junction fracture. In addition, he sustained a left comminuted displaced olecranon fracture.

Due to his olecranon fracture, he would be limited in his upper extremity weight bearing; therefore internal fixation of his pelvic fractures was indicated to allow greater mobility and decrease reliance on an assistive device.

CASE PLANNING

The CurvaFix IM Implant was chosen for his posterior pelvic ring for its larger diameter as well as its ability to provide greater stability and earlier weight bearing without having to extend through the healthy contralateral sacroiliac joint.

The CurvaFix IM Implant was also chosen for his anterior pelvic ring due to his young age and need for immediate weight bearing. The alternative, cannulated screw fixation, is often difficult in young healthy bone, due to the narrow corridor of the pelvis. The ability to steer the CurvaFix Implant through the narrow corridors of hard bone was advantageous in this patient.

CURVAFIX IM IMPLANTS

- A CurvaFix IM Implant (150 mm in length) was inserted into S1 with excellent purchase.
- A CurvaFix IM Implant was inserted into the anterior ring, terminating at the pubic symphysis with excellent purchase.

FOLLOW-UP

At two weeks the patient presented at clinic fully weight bearing with a single prong cane in his contralateral hand.

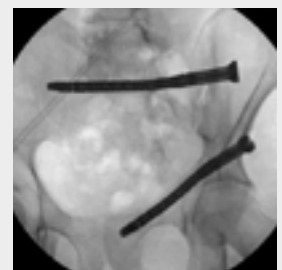
At six weeks he was fully ambulating without an assistive device. He returned to work without incident at three months.

KEY POINTS

- Use of both the anterior and posterior fixation allowed for full weight bearing and decreased reliance of an assistive walking device in a patient with a concomitant upper extremity injury.
- Unlike straight screws, the CurvaFix Implant is able to be steered through the curved intramedullary pathways of the pelvis allowing for a larger diameter to be safely implanted, thus providing increased pelvic stability and earlier weight bearing.
- Use of a curved, percutaneous implant, rather than alternatives, decreased the length of surgery in a patient requiring fixation of both his pelvic and olecranon fracture.



Preoperative



Postoperative



6-week follow-up