Hip Fracture Management
Young, active patient
Preoperative radiographs

**Implant**
TRIGEN® INTERTAN®
Intertrochanteric Antegrade Nail with Integrated Interlocking Screws

**Procedure**
Cephalomedullary nailing and intraoperative compression of a peritrochanteric hip fracture

**Patient information**
48-year-old male, injured in a fall causing a two-part peritrochanteric hip fracture

**Case background information**
The patient slipped and fell on a patch of ice outside his home and fractured his right hip. He is an avid runner and an otherwise healthy individual.

A TRIGEN INTERTAN Intertrochanteric Antegrade Nail was selected to treat the fractured hip because of its potential for enhanced fracture stability. The nail’s trapezoidal proximal geometry press-fits the implant into the trochanteric region for an interference fit. Rotational instability in the femoral neck is prevented by a unique dual proximal screw configuration that also allows controlled intraoperative fracture compression. The clothes pin distal tip of the short nail allows stress modulation to occur in the femoral shaft.
Procedural notes
The procedure was performed with the patient in the supine position. The affected leg was placed in traction and a short INTERTAN™ nail was introduced into the proximal femur. Integrated interlocking lag and compression screws were inserted through the nail into the femoral neck and head and the fracture was reduced via active linear compression. A 5.0mm locking screw was used to lock the nail distally.

Results
The patient began weight bearing to tolerance day-two following surgery.

Four days post-op and with the assistance of crutches, the patient was back in the clinic seeing patients once more. Three months later he was able to get back to exercising and running again.

Implant removal
The patient did not want the implant removed, but claimed that he “sometimes felt... something in his upper thigh... no pain, just a kind of disturbance after running 5 miles.” The implants were subsequently removed and all noticeable disturbance disappeared.

The outcomes shown here may not be common for all patients. Postoperative care and physical therapy is patient specific and should be prescribed based on the surgeon's medical advice.
Surgeon quote

“On the X-rays taken after the removal you can see, that there never was any instability at any time (sclerosed outlining). I like that... He was absolutely satisfied with the whole outcome before and after his removal.”

Case study author

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Trapezoidal shape
Provides enhanced rotational stability allowing early weight-bearing

Interlocking screw construct
Compresses the fracture while controlling rotation

Clothes pin distal tip
Reduces incidence of anterior thigh pain and periprosthetic fracture