

INTERTROCHANTERIC FRACTURE FIXATION

Are the indications for a DHS changing Worldwide?
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Intertrochanteric fractures are estimated to rise in incidence in the coming years due to the aging population. The goal of management of any hip fracture in the elderly is to restore mobility safely and efficiently while minimizing the risk of medical complications and technical failure. Two common treatment options include internal fixation through dynamic hip screws or intramedullary nails.

Intramedullary Nail

Unstable intertrochanteric fractures are technically much more challenging than stable fractures. While DHS has traditionally been viewed as the gold standard, the proximal femoral nail has become popular recently in treatment of unstable and reverse oblique intertrochanteric fractures. Operative time in the dynamic hip screw group was significantly less than the intramedullary group. The most notable difference was a significantly better improvement in mobility in the intramedullary nailing group

Percutaneous compression Plate.

Although intertrochanteric hip fractures have traditionally been treated with the DHS, this treatment is associated with unsatisfactory levels of blood loss, soft-tissue damage, co-morbidities, and failure. Minimally invasive surgery, such as PCCP, may be a more effective alternative to DHS, as it tends to result in less pain, blood loss, morbidity, and a reduction in the incidence of collapse of the fracture, as well as greater functioning.

Percutaneous Compression Plate Vs Intramedullary Nail

Operation time was significantly shorter with significantly less blood loss in patients who received with PCCP compared to the PFNA device. However, clinical and functional outcomes were all similar between groups

External Fixation

In developing countries, due to limited availability of modern anesthesia and overcrowding of the hospitals with patients who need surgery, high-risk patients with "intertrochanteric" fractures remain unsuitable for open reduction and internal fixation.

External fixation, performed under sedation and local anesthesia, offers significant advantages in high-risk geriatric patients in the form of minimal blood loss, minimal surgical trauma, preservation of fracture hematoma, a shorter hospital stay, early ambulation of patients as compared to patients treated conservatively, and removal of implant as easy outpatient procedure.

External fixation resulted in superior cost outcomes, while also decreasing the time from injury until surgery, overall surgical time, and length of hospital stay while providing similar clinical results at the final follow-up compared to the sliding hip screw group