## Results of Trochanteric Stabilizing Plate Superimposed on The Dynamic Hip Screw in the Management of the Unstable Trochanteric Fracture

Significant medial displacement and telescoping of the shaft of femur in an unstable trochanteric fracture are mainly due to unstable posteromedial and greater trochanteric fragments with unstable head-neck fragment biomechanically. Addition of trochanteric stabilization plate (TSP) in unstable trochanteric femur fractures can minimize considerably the post-operative complications. In the current study we investigate the results in unstable trochanteric fractures fixed with TSP superadded to the standard DHS.

The study was conducted on 32 patients with unstable trochanteric fracture managed with TSP superimposed on DHS, at our institution between January 2018 and January 2020. The study enrolled only 30 patients, as two patients were lost to follow-up. Clinical and radiological assessments were done at the 6th, 12th, and 24th post-operative weeks. The degree of the bone union was evaluated by conventional X-rays and scored by Radiologic Union Score for Hip (RUSH). While the function of hip was scored using the Harris Hip Scoring system (HHS).

There were 15 males and 15 females, with a mean age of ( $68.6 \pm 16.2$ ) years (range, 25-95 years). At 6 -month follow-up, RUSH scores was $<20$ points in 2 patients, between 20-25 in 17, and between $25-30$ in 11 . According to Harris hip score at 6 -month follow-up, the results were excellent in 4 patients, good in 8 , fair in 14 and poor in 4.

DHS augmented with TSP in unstable trochanteric fracture is an efficient method with satisfactory clinical and radiological results. It effectively supports the unstable greater trochanter fragment, and counteracts medialization of the femur and rotation of head-neck fragment, reducing peril of postoperative lateral wall fractures and re-operation.

