Fixation of Intertrochanteric Fractures: Dynamic Hip Screw versus Locking Compression Plate

Background: According to the existing literature, the Dynamic Hip Screw (DHS) is the preferred standard for the treatment of intertrochanteric fractures. However, some surgeons use other devices such as the Locking Compression Plate (LCP).

Objectives: In this study, we compared the outcome of using DHS or LCP in intertrochanteric fractures.

Materials and Methods: This cross-sectional study was carried out on 104 patients who were referred to Pursina Hospital in Rasht, Iran with intertrochanteric fractures of the femur treated with either the DHS or LCP devices. Demographic features, existence or nonexistence of stability and operating time were obtained from questionnaires. During a 6-month follow-up after surgery, patients were interviewed to record variables such as Harris Hip Scores and complications. The patients were also interviewed on their final visit (between 9 and 31 postoperative months). The collected data was analyzed using SPSS.

Results: We discovered that the number of incidences of limb shortening and device failure was higher for patients treated with the LCP device (P = 0.048 and P = 0.014). Patients treated with the DHS device had higher Harris Hip scores for both the 6-month postoperative and the final evaluation visits (P = 0.01 and P = 0.018).

Conclusions: Despite the complications of fixation with the DHS device, it remains the most successful for treatment of intertrochanteric fractures.

Keywords: Hip Fractures, Infection, Joint, Fracture Fixation