

PIRIFORMIS-SPARING HIP ARTHROPLASTY IN FEMORAL NECK FRACTURE - SINGLE CENTER EXPERIENCE

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Introduction: Posterior dislocation is a nightmare for posterior approach in hip arthroplasty, especially for neck of femur (NOF) fracture patients. Piriformis sparing is a new technique that is believed to reduce risk of dislocation and improve immediate functional outcome. This study is a preliminary study to assess successful of piriformis sparing hip arthroplasty.

Methodology: This is a prospective study done in Penang general hospital. All patients with NOF fracture above 60 years old were included. Two orthopedic surgeons performed all procedure (total hip replacement-THR and bipolar hemiarthroplasty-BH) in the study. Complication rate and Harris hip scoring (HHS) questionnaire were used to measure functional outcome post-operatively. Minimal follow up was 1 year.

Discussion: 22 patient were recruited in the study. The mean age of patient was 75.6 ± 7.2 year old. 10 patients (45%) had THR done while others 12 patients (55%) had BH. The average HHS score at 2 week and 6 month were 75.0 ± 12.1 and 81.6 ± 12.2 . HHS showed significant improvement at 6 month compared to 2 week postoperatively ($p < 0.01$). Complication rate 9.5% were reported with 1 superficial surgical site infection and 1 poor functional outcome (wheel-chair bound). Both from THR group. No hip dislocation had occurred during follow up. 21 patients (95%) of our patients able to walk with or without minimal support at 6 months follow up.

Conclusion: Piriformis sparing approach in hip arthroplasty resulted satisfactory outcome among elderly suffering displaced femoral neck fracture.