

## THE CLINICAL OUTCOMES OF DIRECT ANTERIOR APPROACH IN TOTAL HIP ARTHROPLASTY - KPJ TAWAKKAL EXPERIENCE-

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**Introduction:** The direct anterior approach (DAA) in total hip arthroplasty (THA) has reported success with early recovery and lesser complication. However, devastating complications being reported raise the surgeon's responsibility to reconsider. This study aims to report the clinical and functional outcomes for anterior minimal invasive surgery (AMIS) technique in total hip arthroplasty.

**Methodology:** A prospective cohort study was performed on a group of 18 hips from 15 patients who underwent THA with DAA from February 2015 to September 2018 with at least one year of follow-up post-surgery. The clinical and functional outcomes were measured with Visual-Analog-Scale (VAS), Oxford-Hip-Score (OHS), Harris-Hip-Scores (HHS), intraoperative blood loss, surgical drain, duration of surgery and duration of hospital stay. The complications and radiological parameters were also recorded.

**Discussion:** It was observed the average VAS pre-surgery,7.5; post-surgery 6 weeks,1.9; post-surgery 6 months,0.6; post-surgery one year,0.5; post-surgery 2 years,0.3; post-surgery 3 years,0.5. The average OHS pre-surgery,20.3; post-surgery 6 weeks,38.3; post-surgery 6 months,43.6; post-surgery one year,43.4; post-surgery 2 years,43.9; post-surgery 3 years,43.7. The average HHS pre-surgery,45.0; post-surgery 6 weeks,79.7; post-surgery 6 months,90.3; post-surgery one year,90.0; post-surgery 2 years,90.7; post-surgery 3 years,89.2. A good reduction of VAS by 5.6 scores, improvement of OHS by 18.0 scores and improvement of HHS by 34.7 scores as early as 6 weeks post-surgery. The perioperative parameters were average intraoperative blood loss of 216.7ml, average of 160.8ml blood loss in surgical drain, average duration of surgery was 126.1 minutes, and mean duration of hospitalization was 5.6 days. The main complications observed were lateral femoral cutaneous nerve (LFCN) neuropraxia (11.2%) and hip dislocation (5.6%). Meanwhile all the cases had acceptable positioning of implants, no implant loosening, no surgical site infection or implant subsidence observed.

**Conclusion:** Total hip arthroplasty with direct anterior approach gives good clinical outcome with low complication therefore it is a strong consideration for total hip arthroplasty.