Total hip arthroplasty performed using conventional and tissue-preserving techniques: A prospective study assessing recovery and complications

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Abstract:
Less-invasive methods of performing total hip arthroplasty have been considered controversial with reports of increases in complication rates and component malposition. To investigate this issue, a prospective study of 115 consecutive total hip arthroplasties performed through a Superior Capsulotomy exposure with surgical navigation (study group) were to 128 consecutive total hip arthroplasties performed through a transgluteal exposure without surgical navigation. The two groups were controlled for complexity and had no significant differences in sex, diagnosis, side, patients with bilateral surgery and previous surgery. Patients were evaluated for perioperative complications and for clinical recovery at 1st and 2nd postoperative follow up visits. Results of the study demonstrate that the study group had significantly better recovery at both the first and second follow-up intervals. In addition the study group had a lower incidence of perioperative complications and a smaller standard deviation in cup position as measured on plain radiographs.

The current study demonstrates the potential that less-invasive surgical techniques with the philosophy of maximally preserving the abductors, posterior capsule and short rotators, may result in a safer operation with an accelerated recovery than traditional established techniques.