

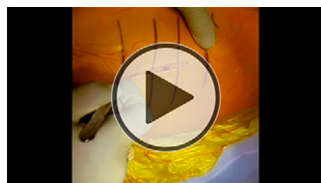
KEY PROCEDURES

DIRECT ANTERIOR HIP EXPOSURE FOR TOTAL HIP ARTHROPLASTY

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Published outcomes of this procedure can be found at: *J Arthroplasty*. 2010 Aug;25(5):671-9.

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Abstract

Total hip arthroplasty through the direct anterior approach provides the only true internervous access to the hip joint. The indications are the same as those for total hip replacement performed through any other approach. If necessary, the approach can be extended proximally or distally and can be used for complex primary cases as well as for revision cases. The principal steps in the procedure include (1) preoperative planning to help the surgeon restore leg length and lateral offset and assess for possible surgical pitfalls; (2) positioning of the patient supine on a regular orthopaedic table with a bump beneath the pelvis and an additional arm-board to support the opposite leg; (3) a longitudinal skin incision starting 3 cm lateral and distal to the anterior superior iliac spine and continuing along the muscles to the tensor fasciae latae; (4) creation of an intermuscular portal by making a longitudinal incision along the interval between the tensor fasciae latae and the sartorius muscles and performing blunt dissection medial to the tensor fasciae latae; (5) exposure of the capsule by cauterizing or ligating the ascending branches of the lateral circumflex artery and removing the precapsular fat pad; (6) anterior capsulectomy and double osteotomy, done by incising the capsule along the neck and perpendicular to the neck at its attachment, excising the anterior aspect of the capsule, and then performing one osteotomy at the subcapital level and another at the base of the neck; (7) acetabular preparation and cup implantation, performed by incising the medial part of the capsule, removing the labrum and osteophytes, using standard or offset reamers for the acetabulum, and implanting the cup according to standard anatomical landmarks; (8) proximal femoral release by removing the superolateral aspect of the capsule and releasing the posterior aspect of the capsule to elevate the femur; and (9) femoral preparation and implantation, done by opening the femoral canal, broaching with a double offset broacher, and inserting the femoral component into the space created by the broachers. In a randomized,

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prospective, controlled trial comparing the direct anterior with the direct lateral approach¹, we showed better functional outcomes with the direct anterior approach at six weeks after the surgery. At two years, the outcomes were similar between the groups.

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