KEY PROCEDURES

HEMIARTHROPLASTY FOR FEMORAL NECK FRACTURE

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Abstract

Hemiarthroplasty is a common treatment for femoral neck fractures in the elderly population. The main complications are periprosthetic dislocation and infection, which potentially impact morbidity and quality of life and may contribute to mortality. This procedure can be technically demanding, and adequate closure of the capsule and soft tissue cannot be emphasized enough. One advantage of a bipolar prosthesis is that it can be easily converted to a total hip arthroplasty without replacing the femoral component and with approximately the same complication rates as a revision total hip arthroplasty. Cement should be used when the patient is osteoporotic or has a Dorr type-C canal because there is a significant reduction in risk of fracture. The addition of a collared stem is helpful if there is a crack in the calcar extending from the fracture. The procedure is as follows. (1) The patient is placed in the lateral decubitus position. (2) The surgical site is prepared and draped to above the iliac crest and mid-sacrum. (3) A posterior approach is utilized. (4) The hip is dislocated. (5) A cut is made at the femoral neck. (6) The implant is templated with the femoral head. (7) The femur is broached. (8) The trial implant is placed. (9) The femur is cemented. (10) Trial implants are removed and cement is placed. (11) The final stem implant is placed in 5° to 10° of anteversion. (12) The final head and neck implants are trialed and then placed. (13) Implant position and range of motion are tested. (14) The surgical wound is irrigated. (15) Short external rotators are repaired.

The posterior approach, which is often used, is known for increased rates of dislocation. The rate of dislocation can be minimized with repair of the posterior capsule and posterior soft tissue. Proper placement of the implants is of the utmost importance to minimize complications. Other contributing factors that lead to dislocation are implant malpositioning and patient factors.

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