A Comparison Between Direct Anterior Surgery Of The Hip (DASH) And The Anterolateral (AL) Surgical Approach To Total Hip Arthroplasty: Postoperative Outcomes

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Introduction:
This study compared clinical and functional outcomes at six weeks, six months and one year intervals between the DASH and AL approaches. Unlike the anterolateral procedure, the DASH does not require transverse dissection or subsequent repair of muscle or tendon. Accordingly, this study was undertaken in order to evaluate function and pain differences that may be attributed to a change in surgical approach.

Materials/Methods:

Results: Six Weeks Postoperative

Six weeks postoperatively, the DASH cohort had superior mean Harris Hip scores, less pain, and better function (means = 89, 40, and 28 respectively) compared to the AL cohort (means = 72, 36, and 17 respectively; p<0.0001 for each). Ambulation, need for support devices, stair climbing, and ability to don socks and shoes were also superior in the DASH cohort at six weeks (p<0.0001 for each). Six-week postoperative activity levels were higher in DASH hips (p<0.0001); fewer DASH pts were sedentary or semi-sedentary (26% versus 73%).

Discussion:
The direct anterior approach to THA offers several advantages including utilization of the supine position, use of anatomical intervals for soft tissue preservation, use of intraoperative fluoroscopy for verification of acetabular and femoral prosthetic position. Correct femoral offset and length are also facilitated. The approach preserves the short external rotators and capsule thus decreasing the potential for posterior dislocation more commonly seen with the posterior approach. Preservation of the hip abductors eliminates the early postoperative trendelenburg gait commonly seen with the anterolateral approach.

Conclusion:
Patients undergoing the DASH approach to THA showed improved function and pain scores six weeks and six months postoperatively when compared to AL THA. There is also functional superiority which continues to one year postoperatively.