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Anterior Approach THA
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The anterior approach follows the Smith-Petersen interval distal to the ilium. The goals of anterior THR are” maximal soft tissue preservation and enhanced accuracy of acetabular position as well as leg length and femoral offset. The technique originated with Robert Judet in Paris who in 1947 first implanted his acrylic femoral head replacement through the anterior approach utilizing the Judet Orthopedic Table. Judet originally chose this approach for several reasons: the patient is supine, the hip is most superficial from anterior, the approach is internervous, the approach does not disturb muscle attachments or require muscle splitting.

This approach gives excellent acetabular access while the femoral access can present special problems. Femoral access however is best facilitated with specially designed orthopedic tables that position the extremity in extension, adduction and external rotation during femoral preparation and prosthesis insertion. An additional feature of tow orthopedic tables (OSI PROfx and OSI HANA, Union City, California) is a hook-jack device that directly lifts and supports the proximal femur to further facilitate access.

Besides Judet’s original reasons for choosing this approach, other advantages include: small incision, preservation of hip deltoid, improved control of component position and leg length, no post op dislocation precautions, applicable to all patient regardless of BMI, facilitates bilateral replacement.

It is the author’s preference to enhance accuracy and reproducibility with “fluoroscopic image guidance” during the procedure for checks of acetabular position, leg length and offset. With the orthopedic table however, the femoral and acetabular visualization is excellent and therefore not all surgeons using this technique utilize intra operative x-ray. Computer guidance is another option.

Documentation of the initial North American experience is being performed by the Anterior THA Collaborative and includes data regarding 1277 THA in 1152 patients (125 bilateral) from 9 clinical sites. All acetabular components were uncemented with 94% of femoral

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components uncemented and 6% cemented. Complications included: Greater trochanter fx 1%, calcar split 0.5%, shaft fx 0.6%, infection 0.6%, and dislocation 0.6%. Median time to discarding assistive devices was 14 days.

References:

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