The approach to THR should allow adequate visualization and access so as to implant in optimal position whilst minimizing muscle injury, maintaining or restoring normal soft tissue anatomy and biomechanics and encouraging a rapid recovery with minimal complications. Every surgeon who performs primary hip arthroplasties will expound the particular virtues of his or her particular routine surgical approach. Usually this approach will be the one to which the surgeon was most widely exposed to during residency training.

There is a strong drive from patients, industry, surgeon marketing campaigns, and the media to perform total hip arthroplasty through smaller incisions with quicker recoveries. The perceived advantage of the anterior approach is the lack of disturbance of the soft tissues surrounding the hip joint, less pain, faster recovery with the potential for earlier return to work, shorter hospital stay and improved cosmetic results. The potential disadvantages include less visibility, longer operation time, nerve injuries, femoral fractures, malposition and a long learning curve for the surgeon (and his / her patients).

The anterior approach for THA was first performed in Paris, by Robert Judet in 1947. This procedure has since been performed consistently by a small group of surgeons and has recently gained great popularity. Access to the hip can be safely performed with one or two assistants. The advantages of the anterior approach for hip arthroplasty are several. First, the hip is an anterior joint, closer to the skin anterior than posterior. Second, the approach follows the anatomic interval between the zones of innervation of the superior and inferior gluteal nerves lateral and the femoral nerve medial. Third, the approach exposes the hip without detachment of muscle from the bone. Care must be taken to avoid cutting the lateral femoral cutaneous nerve which runs over the fascia of the sartorius.

The mini-incision variation of this exposure was developed by Joel Matta in 1996. He rethought his approach to hip arthroplasty and by abandoning the posterior approach and adopting the anterior approach his goals were: lower risk of dislocation, enhanced recovery, and increased accuracy of hip prosthesis placement and leg length equality. This approach preserves posterior structures that are important for preventing dislocation while preserving important muscle attachments to the greater trochanter. The lack of disturbance of the gluteus minimus and gluteus medius insertions facilitates gait recovery and rehabilitation while the posterior rotators and capsule provide active and passive stability and account for immediate stability of the hip and a low risk of dislocation. Using the anterior approach, patients are allowed to mobilize their hip freely.

The gluteus maximus and tensor fascia latae muscles insert on the iliotibial band which joins them and form a ‘hip deltoid’. Lack of disturbance of these abductors and pelvic stabilizers is another benefit of the anterior approach and accelerate gait recovery.

The lateral femoral cutaneous nerve is at risk when the fascia is incised between the tensor fascia latae and the sartorius muscle. Damaging it may lead to a diminished sensation on the lateral aspect of the thigh and formation of a neuroma.

A disadvantage of the approach is the fact that a special operating table with traction is required. Potential complications include intraoperative femoral and ankle fractures. These can be avoided through careful...
REFERENCES: