

## The Anterior Approach to Total Hip Replacement Background Information

### What is the direct anterior approach for total hip replacement?

The direct anterior approach is a minimally invasive surgical technique that allows a surgeon to access a patient's hip joint through the front (anterior) of the hip as opposed the side (lateral) or back (posterior). Initially performed in Europe in the late 1940's, the direct anterior approach has been continually refined over the years and is believed by many surgeons to offer several advantages to a patient.

### What are the potential advantages of the direct anterior approach?

#### Incision Length

With the direct anterior approach, a patient lies on his or her back and an incision of between three to five inches is made in the front of the hip near the groin.

**Note:** Conventional total hip replacement requires an incision of between eight and twelve inches

#### Muscle Trauma

Considered by some surgeons as a tissue-sparing procedure, the direct anterior approach allows surgeons to work in the space between the muscles and ligaments without detaching them from the bone. Because there is less muscle trauma involved when accessing the hip from the front, many patients report experiencing less postoperative pain.

**Note:** The most important muscles for hip function are the gluteal muscles that attach to the pelvis and femur. In the direct anterior approach, these muscles are left undisturbed and do not require a healing process to recover from surgical trauma.

#### Leg Length

X-rays taken during direct anterior surgery help promote correct position, size, and fit of the artificial hip implants.

**Note:** Leg-length discrepancies are the leading cause of malpractice suits after total hip replacement surgery.

#### Hospital Stay

The average hospital stay for patients undergoing a direct anterior approach total hip replacement is between two to four days.

**Note:** The average hospital stay for conventional hip replacement patients is between three and ten days

#### Recovery Time

Following anterior hip replacement, most patients are immediately able to bend their hip freely and bear full weight when comfortable, resulting in a more rapid return to normal function. After surgery, patients are instructed to use their hip normally without cumbersome restrictions. In supervised therapy, patients go up and down stairs before their hospital release.

**Note:** Conventional total hip replacement requires strict precautions including limiting hip motion for 6 to 8 weeks after surgery. Patients are also advised to limit flexing the hip to no more than 60 to 90 degrees, complicating activities such as sitting, putting on shoes or getting in and out of a vehicle.

### **Post-surgical Dislocation**

Many surgeons believe that the direct anterior approach significantly reduces the incidence of future hip dislocations because none of the stabilizing muscles and tendons are cut in order to gain access to the hip joint. Patients are however strongly recommend not to cross their legs or bend over too far to sit in a low chair – restrictions that can compromise their quality of life during recovery

**Note:** Dislocation is a leading cause of implant failure after total hip replacement surgery.