

of the stablest joints. A deep cup and an almost spherical head lead to a mechanical stability which is augmented with the presence of ligamentum teres which binds the two components.

## FEMUR

There are three points of importance as regards the upper femur. The anteversion, the neck shaft angle and the relation of the femoral medulla with reference to the greater and lesser trochanters.

## ANTEVERSION

The anteversion is the angle at which the head faces in the coronal plane with reference to the long axis of the bone. For simple explanation, we could look the femur end on from the top and compare the axis of the deviation of the femoral head in relation with the lesser trochanter; and this will be the anteversion.

Thus if the patient lies supine and the femoral condyles lie parallel to the bed, the head will be lifted towards the ceiling to about 9 degrees to 16 degrees -which is the normal anteversion.





inferiomedially especially around the foveolar area and in some cases may be egg shell like.

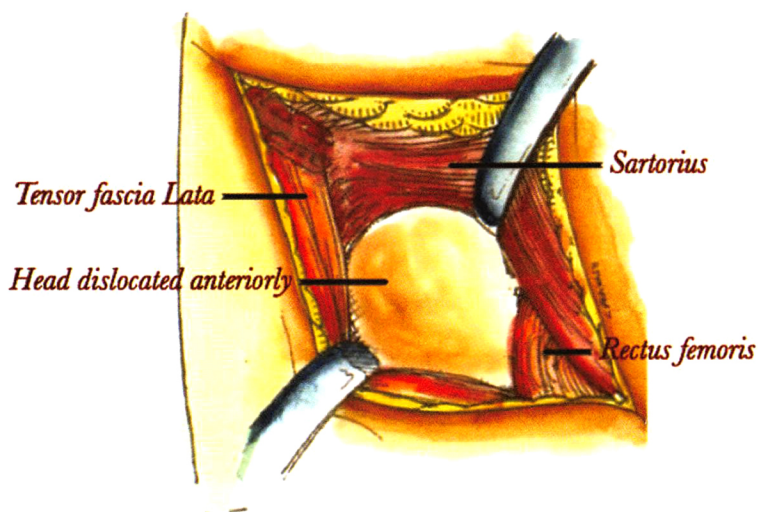
Conversely the roof area which bears the brunt of weight transmission when a person walks; is correspondingly thicker. The thickest portion is the pelvic flare wherein the ilium ischium and the Pubis blend.

Charnley used this fact by making the largest pilot hole here and Ring used this part to affix his acetabular components with a screw or peg type cup.

In cases of protrusio and acetabular wall deficiencies, it is this part that has to be reinforced to allow a normal transmission of forces across the joint.

Muscles over lateral pelvic wall are subperiosteally stripped as far posteriorly as required, and one can go right up to the sciatic notch.

Increased exposure can be obtained by detaching the attachment of Rectus Femoris from the anteroinferior iliac spine.



*Femoral head is dislocated by internally rotating the limb*

Adduction and external rotation of the hip stretches the hip capsule which is cut with a 'T' shaped incision.

Gluteus Medius can be stripped off the lateral pelvic wall for additional exposure.

External rotation and adduction will dislocate the hip after capsular incision.

## **Indications**

### ***Pediatric Hip Exposures***

Congenital dislocation of the hip where both femoral and acetabular surgeries can be combined.

### ***Pelvic Osteotomies***

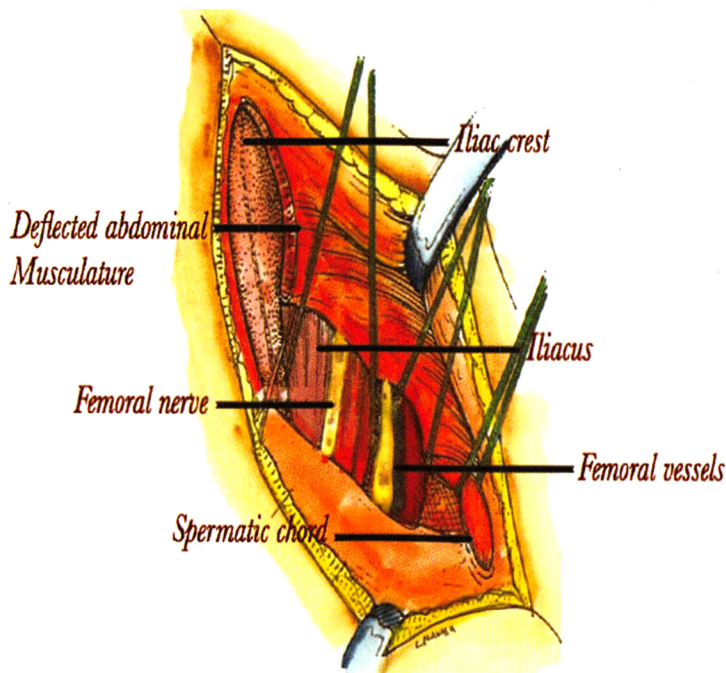
Traumatic anterior dislocation, and acetabular injuries involving anterior column of pelvis.

The aponeurosis of external oblique is divided from ASIS along the iliac crest. The lateral cutaneous nerve of the thigh is now identified and protected.

At this stage, starting from the conjoint tendon, the inguinal ligament is detached from its origins, leaving a dense fibrous strip for reattachment.

The Iliopsoas muscle mass and femoral nerve come into view. The Iliopectineal head is identified and detached from pelvis, allowing mobilization of Iliopsoas muscle mass along with the femoral nerve.

By passing a loupe of soft tape or rubber catheter, these can be retracted in either direction.



This now exposes three bundles of structures. Laterally is the Iliopsoas, and medially is the spermatic chord (in the male). Between them lies the femoral neurovascular bundle. These three can be retracted carefully in either direction to expose the whole of pubic ramus.