Intertrochanteric, Subtrochantric Femoral Osteotomies For Posttraumatic, Congenital And Nontraumatic (Acquired) Conditions

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Abstract

The goal of osteotomy for osteonecrosis8,9,10,11,12,13,14 of the femoral head is to rotate the diseased are a way from the weight-bearing zone there by transferring forces to a less involved or normal region. Since most lesions are anterolateral, a flexion - valgus intertrochanteric osteotomy is usually the osteotomy of choice. It is important to separate etiology from pathogenesis. However, the single most important an factor in the treatment of osteonecrosis is establishing an early diagnosis.

OSTEOTOMY FOR OSTEONECROSIS

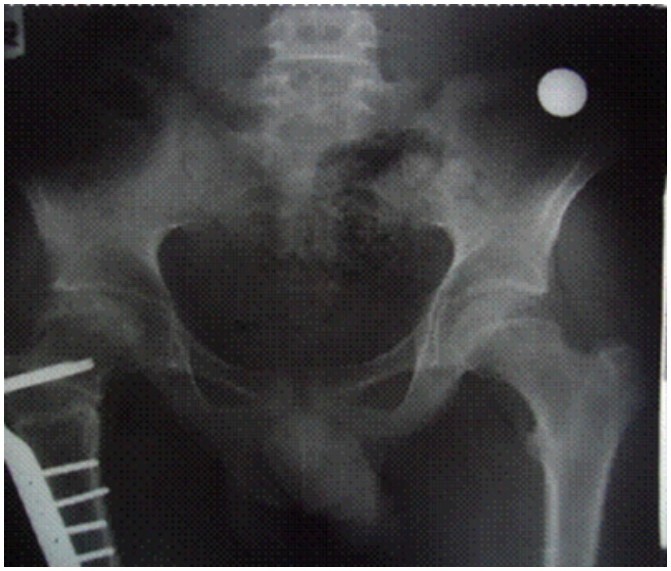
The goal of osteotomy for osteonecrosis[8,9,10,11,12,13,14] of the femoral head is to rotate the diseased are a way from the weight-bearing zone there by transferring forces to a less involved or normal region. Since most lesions are anterolateral, a flexion – valgus intertrochanteric osteotomy is usually the osteotomy of choice. It is important to separate etiology from pathogenesis. However, the single most important an factor in the treatment of osteonecrosis is establishing an early diagnosis. Intertrochantertic osteotomy is indicated for selected patients with Ficat stage II or III osteonecrosis as well as some patients with a stage IV lesion. The necrotic angle as described by kerbouletal considered a lesion to be large when the summed angle was>200° and small when it was<130°. Wagner [9,10,11,12,13,14,15,16,17,18] has Reported favorable results with an intertrochanteric osteotomy that couples a medical and anterior by based wedge removal resulting in both varus and flexion of the distal fragment. A discussion of osteotomies for osteonecrosis con not be complete without mentioning the sugioka[11,12,13,14,15] trans trochanteric rotational osteotomy which was initially reported in Japan in 1973. (Fig 7A and 7B)

Figure 1

Figure 7a: INFH in a 15 yr old girl

Figure 2

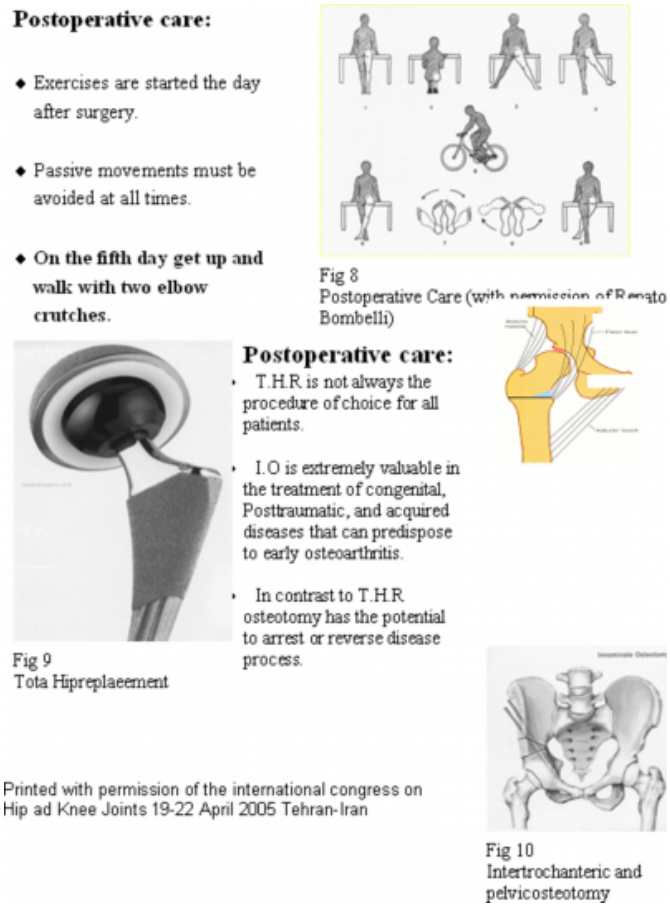
Figure 7b: Same patient 6 months following flexion varus osteotomy



ADVANCEMENT OF THE GREATER TROCHANTER

Advancement[17,18,19,20] of the greater is useful in the treatment of a high-riding trochanter, because it eliminates painful impingement in abduction and improves abductor muscle function and endurance. Wagner[18] considered the procedure to be " The most efficient Joint saving operation that may be performed alone or in concert with other osteotomies, such as an intertrochan or periacetabular. Loyd-Roberts et al. reported that the procedure improves gluteal efficiency and increases the Range of abduction which is limited by impingement of the trochanter on the ilium.

Figure 3



OSTEOTOMY FOR DYSPLASIA AND SECONDARY OSTEOARTHRITIS

The most common indication for intertrochanteric osteotomy has been the adult sequelae of developmental dysplasia of the hip. Bombelli[10,11,12,13,14,15,16,17,18,19,20,21] et al. reported on the morphologic features of osteoarthritis of the dysplastic hip.

OSTEOTOMY FOR SLIPPED CAPITAL FEMORAL EPIPHYSIS

Imhauser[7] introduced the triplane intetrochanteric osteotomy to restore Joint congruity with the intention of decreasing the prevalence of later hip arthritis. When the slifangle is 30° to 60° correction of all three components of the deformity is preferred. The angulation of the intertrochanteric osteotomy is primarily flexion with valgus and internal rotation of the distal fragment as need.

OSTEOTOMY FOR THE SEQUELAE OF LEGG-CALUE-PERTHES DISEASE IN ADULTS

Before an intertrochanteric osteotomy is recommended a radiograph made with the limb in adductions should

demonstrate improvement in the appearance of the hip Joint. Up to 3 cm of length can be obtained with a non-waged resection, open valgus or valgus extension biplane intertrochateric osteotomy.

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