An extended iliofemoral approach for total arthroplasty in late congenital dislocation of the hip: a case report

A. Kumar, A. B. Shair

Department of Orthopaedic Surgery, Edith Cavell Hospital, Peterborough, UK

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Summary. *An extended iliofemoral approach for total arthroplasty in a late case of congenital dislocation of the hip is described.*

Résumé. *L'abord ilio-fémoral étendu a été utilisé pour arthroplastie totale dans la luxation congénitale de la hanche à grand déplacement. Autant que nous sachions, cet abord n'a pas été utilisé auparavant dans cette indication. Nous pensons qu'il est meilleur que les abords pratiqués habituellement pour traiter ce genre de problème.*

Introduction

Charnley and Feagin wrote that total arthroplasty for complete congenital dislocation of the hip produced more hazards than the condition itself warranted [1]. A wide exposure is necessary to deal with the distorted anatomy due to the marked proximal and posterior displacement of the femur with increased anteversion of the femoral neck [2, 3]. Preservation or restoration of muscle function, especially of the abductors, is necessary to achieve a stable reduction with a good range of movement. Reattachment of the abductors is not always satisfactory and may lead to restricted hip movement [3]. The approach described here has not been used previously for arthroplasty in old congenital dislocation of the hip as far as we are aware.

Reprint requests to: A. Kumar, 10 Dobson Close, Wrightington Hospital, Wigan, WN6 9ES, UK

Fig. 1. Anteroposterior radiograph of the pelvis, in a woman 65 years of age, showing an old congenital dislocation of the left hip. The femoral head was 8 cm proximal to the true level of the acetabulum

Fig. 2a, b Anteroposterior (a) and lateral (b) radiographs 18 months after total arthroplasty

Case report

A woman, 65 years of age, presented with increasing pain in her left hip which severely affected her daily activities and her sleep. Clinical and radiographic examination (Fig. 1) confirmed that she had congenital dislocation of her left hip, with painful restriction of movement.

Operative technique

The patient was placed on her right side. Her left leg was draped free and the knee kept flexed throughout the procedure to avoid tension on the sciatic nerve.

An extended iliofemoral approach was used [4]. The gluteal muscles and the tensor fasciae lata were elevated subperiosteally from the iliac wing. The tendons of gluteus medius and minimus were divided 5 cm from their attachment to the greater trochanter. The muscles were retracted posteriorly with their neurovascular bundle to exposed the rotators. The piriformis tendon was divided 2 cm from the greater trochanter; the obturator internus and the gemelli tendons were divided 1.5 cm distally and held back with a stay suture to protect the sciatic nerve. The rectus femoris tendon was divided and the capsule excised. After releasing the iliopsoas the femoral head, which was small and facing anteriorly, was brought down to the level of the true acetabulum. The greater trochanter was small and facing posteriorly. The boundary of the acetabulum was confirmed and reamed up to 44 mm diameter, achieving a satisfactory depth. A small size cup was cemented in position. Two deep drains were used. The external rotators, gluteal tendons and rectus femoris were repaired. The gluteal fascia was stitched to the abdominal fascia and the wound closed.

The drains were removed after 48 h and the patient allowed up. Recovery was uneventful and she was discharged on the 10th day after operation.

Results

At follow-up after 2 years, the patient had no pain and no leg length discrepancy. The hip joint had a good range of movement and she was able to walk briskly without a limp and without using a stick. She was very pleased with the result. The radiograph (Fig. 2) was satisfactory.

Discussion

The extended iliofemoral approach described here provided the wide exposure needed to allow the femoral head to be brought down to the level of the true acetabulum without compromising function of the hip. This is much easier than with the trans-trochanteric approach and allows better recognition of the true acetabulum; all the muscles were repaired at their normal tension, and the risk of damage to the sciatic nerve was reduced. There were no complications and the result was very satisfactory.

References

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