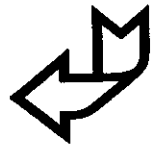
SUMMARY



SUMMARY

Our review of the literature explained the methods of diagnosis of congenital dislocation of the hip and biomechanical aspects, the indications, the operative steps and the complications of Salter's innominate osteotomy.

We studied 28 patients (33 hips) with congenital hip dislocation, which had been treated by open reduction and Salter osteotomy at the Misr International Hospital and Benha University Hospital. Radiological assessment of acetabular index, center edge angle, status of Shenton's line and Severin classification was done before and after the operation. Clinical assessment of stability, pain, Trendelenburg test, limping gait, lower limb length inequality, and range of motion was performed. The mean follow-up period was 2.3 years. The mean age at operation was 2.7 years. Six cases required a concomitant procedure during the primary operation. These procedures were either femoral shortening, varus derotation, osteotomy or shelf. Four cases required subsequent procedures later on due to either redislocation in one case and progressive subluxation in three cases. The overall radiographic results were 91% excellent and good results.

Clinically, 89% of the cases had been classified as excellent or good at the last follow-up visit. Results were better when the operation was performed as a primary procedure, than as a secondary procedure. We obtained better results in children younger than 4 years than older cases. For the patients with acetabular index less than 35°, we obtained 100% excellent or good results. Performing a Salter osteotomy - by itself - may be a stimulating factor to the growth and ossification of the dysplastic acetabulum.

There were few complications: one case of redislocation and four cases of vascular necrosis of the femoral head. One of these cases developed contralateral avascular necrosis of the femoral head. The combination of open reduction and Salter osteotomy is a safe and reliable method of treatment of neglected congenital hip dislocation.