Developmental dysplasia of the hip (walking age)

Objectives

1. Describe signs of developmental dysplasia in the ambulatory child
2. Describe treatment approaches to the child of walking age with developmental dysplasia of the hip
3. Describe the natural history of untreated developmental dysplasia of the hip
4. Discuss complications of treatment of older children with developmental dislocation of the hip

Discussion point

1. Would it be better judgment to attempt reduction of a 6 year old with an untreated unilateral dislocation or leave it alone? With a bilateral dislocation?

Discussion

It was until the second half of the twentieth century that routine diagnosis of DDH was made before walking age in North America, although late diagnosis still is common in developing countries. All the anatomic changes in the pelvis and proximal femur become more severe as the child starts ambulating. At this point, it is much more common to perform bony procedures on one or both sides of the joint to achieve and maintain reduction. Femoral shortening has matured as a method of "decompressing" the hip to reduce the incidence of avascular necrosis. Traction also has advocates, and the clinician treating this condition must make his own assessment of the reported results to devise his/her own treatment plan. Surgery is also frequently performed at this age on children who were treated earlier but have residual dysplasia. The long-term studies of Schwend and Pratt on untreated Najavos with acetabular dysplasia provide a yardstick by which one can measure the effects of intervention. The fate of adults with untreated complete dislocations has been addressed by Crawford and Wedge.

Most authors presently reporting on the initial treatment of DDH in the walking age child report positive results that most likely warrant intervention for the older child with untreated DDH. There are also a number of procedures available for refinement of results in the older child with residual dysplasia for whom treatment is felt indicated. The innominate osteotomy of Salter, which redirects the acetabulum anterolaterally has its advocates even into young adult years. The pericapsular osteotomy described by Pemberton is less widely used, but can achieve change of acetabular shape. Double and triple pelvic osteotomies can realign the acetabulum of the older patient, and complex pericapsular osteotomies to redirect the acetabulum are becoming more refined. The judgment and skill required to make good clinical decisions and skillfully execute treatment in this group of patients is considerable.
References


