

INTRODUCTION

Congenital dislocation of the hip is a spontaneous dislocation occurring either before or during birth or shortly afterwards; it's one of the commonest congenital deformities in western races (*Adams et al., 1990*).

The earlier the diagnosis and reduction of the dislocation, the better the prognosis. Even under the best conditions only about half or two-thirds of the patients treated after the year of life can be expected to remain permanently free from trouble. Following up the cases is very essential as gradual redislocation or subluxation is all too frequent and pain from secondary degenerative changes often develops in middle adult life (*Adams et al., 1990*).

The established method for diagnosis of congenital dislocation of the hip is radiography; but it's of little use when hips flexed and abducted as anteroposterior displacement of the femoral head can't be shown on an anteroposterior projection.

Computerized tomography scans can be used in this position; but unsuitable for routine repeated examination. Only ossified structures are visualized in a roentgenogram, which is the sum of their superimposed projections. No assertions can be made concerning hyaline and fibrocartilaginous portions of the hip joint. Thus, the pelvic anteroposterior radiogram provides only a qualified picture of the state of the bony acetabular roof, and no information regarding nonossified structures (*Graf, 1987*).

Radiation exposure is greater with CT, than with plain roentgenography and the study is expensive. It may be necessary to sedate

an infant or young child to obtain an adequate examination, since motion cannot be tolerated.

At one time, contrast arthrography was the only method for assessing the cartilaginous components of the hip joint. In addition to defining the anatomic landmarks of the femoral head and acetabulum, it is an excellent method for detecting the presence of soft-tissue interposition between a displaced femoral head and the acetabulum. In dislocated, irreducible hips, the arthrogram will demonstrate deformity of the labrum, hypertrophy of the ligamentum teres, and obstruction by the transverse acetabular ligament. When performed under fluoroscopy, the arthrogram becomes a dynamic study and can yield specific information regarding changes in femoral head position during dynamic maneuvers.

The disadvantages of arthrography, its invasive nature,, and the requirement for anaesthesia dictate that this technique be reserved for infants who have complicated congenital dislocation of the hip.

Magnetic resonance image provides useful information but is expensive and requires immobility.

Ultrasound; by contrast; is harmless; can be performed very quickly; doesn't require sedation of the baby (*Suzuki et al., 1991*).

Ultrasonography is becoming the standard method of imaging the hip with suspected or confirmed instability or dysplasia during the first several months of life and beyond. It has filled the "imaging gap" for hip dysplasia through its visualization of soft tissue and unossified cartilaginous structures of the immature hip that relatively invisible to routine radiography. (*Hosny, 1992*).