

Clinical Manifestations of Developmental Dysplasia of the Hip

Infants

Shortening of limb on affected side (Galeazzi sign)

Restricted abduction of hip on affected side

Unequal gluteal folds (best visualized with infant prone)

Positive Ortolani test (hip is reduced by abduction)

Positive Barlow test (hip is dislocated by adduction)

Older Infants and Children

Affected leg appears shorter than the other

Telescoping or piston mobility of joint: Head of femur felt to move up and down in buttock when extended thigh is pushed first toward child's head and then pulled distally

Trendelenburg sign: When child stands first on one foot and then on the other (holding onto a chair, rail, or someone's hands) bearing weight on affected hip, pelvis tilts downward on normal side instead of upward, as it would with normal stability

Greater trochanter prominent and appearing above a line from anterosuperior iliac spine to tuberosity of ischium

Marked lordosis and waddling gait (bilateral hip dislocation)

Radiographic examination in early infancy is not reliable because ossification of the femoral head does not normally take place until the 4th to 6th month of life. However, the cartilaginous head can be visualized directly by ultrasonography. Universal newborn screening with ultrasonography has been proposed; however, numerous studies reveal that this approach has a high rate of false-positive results and subsequent overtreatment. Therefore,