Congenital Dislocation Of Hip (Developmental Hip Dysplasia)

**Definition**
Failure of femoral head to rest in acetabulum of pelvis (Fig. 14-4). There are three presentations: hip may be dislocated, dislocatable or subluxated.

This condition is commonly seen in some First Nations communities, but is almost never seen in Inuit people.

A check for congenital problems of the hip is part of routine neonatal screening. This condition is best diagnosed before the child begins walking.

*See section on the musculoskeletal system in "Physical Examination of the Newborn," in chapter 1, "Guidelines for Pediatric Health Assessment."

**Fig. 14-4: Hip Joint**

**Causes**
- Congenital
- Condition exacerbated by use of tikanagans (cradle boards) or other means of swaddling
- Often able to identify other affected family members
- Breech birth

**History**
- If diagnosed after the child is walking, presents as a limp with or without pain

**Physical Findings**

*Inspection of the Newborn*
- Asymmetric fat folds in thigh
- Extra skin folds on involved side

*Inspection of the Older Child*
- Legs unequal in length
- Limp
- Trendelenburg sign: lurching toward affected side

*Palpation*
- Examine child in supine position (on back)
- With thighs flexed, should be able to abduct to 90° in each hip; diagnosis should be suspected if abduction is limited to 60° to 70°

Ortolani-Barlow hip examination for screening newborns:
- Place middle fingers over greater trochanters (outer upper legs)
- Position thumbs on medial sides of knees
- Abduct the thigh to 90° by applying lateral pressure with thumb
- Move knee medially and then replace knee in starting position
- If there is a "clunk," the hip may be dislocatable
- If there is a "click," the hip may be subluxable

**Differential Diagnosis**
- Congenital short femur
- Synovial click
- Congenital adduction contraction
- Fixed dislocation in arthrogryposis

**Complications**
- Long-term disturbance of the gait if left undiagnosed and untreated
- Osteoarthritis

**Management**

*Goals of Treatment*
- Develop improved or normal femoral insertion into acetabulum
- Normalize gait
Nonpharmacologic Interventions
Early detection is important. Hence, the hip exam is an essential part of newborn screening. In addition, infants should be screened several times by nurse and physician during the first year of life, as the problem may not be evident at birth.

Educate community about potential treatments, such as decreased use of tikanagan.

Definitive treatments:
- Splint (e.g. Pavlik harness for children from birth to 8 months of age)
- Casting
- Surgery

Referral
Refer child as soon as possible for assessment by a physician.