Hip Joint Orthopaedic Tests
Orthopedics DX 611

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Hip Anatomy

Palpation
- Point tenderness
- Edema
- Symmetry

Hip Contracture Tests
Thomas Test
- Supine passive hip flexion
- Contralateral hip and knee flexion indicates a positive test for hip contracture
- Evaluate rectus femoris tightness

Hip Contracture Tests
Rectus Femoris Contracture Test
- Involuntary extension of flexed knee with tightness in rectus femoris indicates a hip flexion contracture
**Hip Contracture Tests**

**Piriformis Test**
- Piriformis pain with resisted abduction of hip indicates tight piriformis
- Sciatic pain indicates nerve compression

**Piriformis Syndrome**
- Palpation of piriformis may produce local and/or sciatic distribution pain
- Palpation at spinal nerve root may be negative for pain

**Hip Contracture Tests**

**Ely’s Heel to Buttocks**
- Prone heel to buttocks
- Ipsilateral pelvis rising from table indicates hip flexion contracture or tight rectus femoris

**Ober’s Test for TFL or ITB**
- Failure to descend smoothly indicates a positive test for contracture of the TFL or ITB.

**Trochanteric Bursitis**
- Palpation
- Patrick’s
- Positive finger point
- Laguerre’s
Degenerative Hip Disease

- Patrick’s
- Trendelenburg’s
- Scouring’s
- Laguerre’s
- Difficult to palpate

Patrick’s Test
FABERE & Figure of 4

- Flexion
- Abduction
- External rotation

Compresses femoral head into acetabulum
Positive test with pain in hip, which indicates an inflammatory process

Trendelenburg’s Test

- Standing flexion of hip
- Downgoing of contralateral hip is a positive test
- Indicates contralateral gluteal motor weakness and/or hip pathology

Anvil Test

- Percussion of calcaneus compresses hip joint
- Positive test with pain, which indicates fracture or hip pathology
Congenital Hip Dysplasia

- Flattened acetabular cavity permits dislocation or subluxation of the femur head.

Barlow’s Test
- Identifies unstable hip that lies in the reduced position but can be passively dislocated (and hence unstable)
- Less than 2% of infants will have a positive Barlow test
- 90% will normalize with no treatment after 9 weeks

Barlow’s Test Procedure
- Hips are examined one at a time
- Hip flexed & thigh adducted, while pushing posteriorly in line of the shaft of femur, causing femoral head to dislocate posteriorly from acetabulum
- Dislocation is palpable as femoral head slips out of acetabulum
- Diagnosis is confirmed with Ortolani’s test
Ortolani Test
- Identifies dislocated hip that can be reduced in early weeks of life
- A positive test requires active treatment
- If hip remains dislocated (for weeks), limitation of abduction becomes more consistent clinical finding

Procedure
- Examine one hip at a time
- Flex infant's hips & knees to 90 degrees
- Thigh is gently abducted & bringing femoral head from its dislocated posterior position to opposite the acetabulum, hence reducing femoral head into acetabulum

Positive Ortolani Test
- Palpable & audible clunk as hip reduces

Ortolani Test
- With time, it becomes more difficult to reduce femoral head into acetabulum, and the Ortolani test becomes negative

Pavlik Harness
- An infant with DDH and a negative Ortolani sign would not be a good candidate for a Pavlik harness

Congenital Hip Dysplasia DDH
- Also known as Allis’ test
- It is not used to evaluate functional leg length deficiency