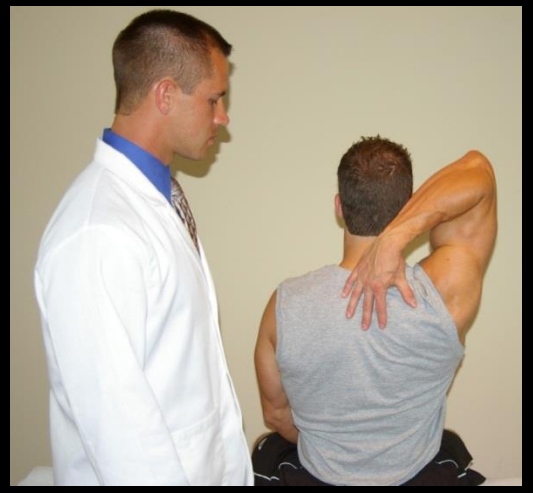
Extremity Examination

K. Jeffrey Miller, DC, FACO, MBA

Apley's Scratch Test

- Shoulder Range of Motion Test
- Symmetry is the key here
- Identification of a lateral scapula



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Mazion's Test

- Glenohumeral Joint pathology or dysfunction
- This isolates the glenohumeral joint
- A chiropractic test, John Mazion was one of the first chiropractic orthopedists, he taught many of my ortho classes

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Dugas' Test

- Shoulder Dislocation
- Unlikely to see
  - Why?
- Replicated during Mazion's Test

- Just listed here as a secondary test because of replication

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Impingement Test

- Impingement Pathology
- The shoulder motion is the same as Mazion's and Duga's
- Impingement can be from tissues and/or bony structures

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Apley's Supraspinatus Test

- Rotator Cuff
- Can be adapted for biceps tendon
- Bursitis is a DDx

Supraspinatus Test

- Supraspinatus Rotator Cuff Test
  - Tendonitis or Tear
- Note the position of the thumbs and the abducted arms
- Nice for bilateral comparison

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Speed's Test

- Biceps Test for Tendonitis or Tear
- Hand position-supination
- Arms less abducted than supraspinatus test

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Acromioclavicular Stress

- AC Joint Test
- Most Common area for Shoulder Degenerative Arthritis
- Shearing motion
- This Maneuver can also be Therapeutic

Cozen's Test

- Lateral Epicondylitis Test
- Same Mechanism as C6 Motor Test

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Reverse Cozen's Test

- Medial Epicondylitis Test
- Same Mechanism as C7 Motor Test

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Valgus Stress

- Medial Collateral Ligament Test
- This test should be performed with the arm straight and a second time with the elbow flexed by 30 degrees
  - Why?

Varus Stress

- Lateral Collateral Ligament test
- This test should be performed with the arm straight and a second time with the elbow flexed by 30 degrees
  - Why?

Finkelstein's Test

- Test for Stenosing Tenosynovitis
- Should Always be Performed when Symptoms of CTS are Present

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Ellis Test

- Test for Wrist Flexor Tendonitis
- *Great test* for early detection of pathology that can lead to CTS
- This is hard to find a reference for.
  - Art Croft was mine.

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Phalen's Test

- Carpal Tunnel Syndrome
- The testing positioning is held for 1-2 minutes
  - Some sources say 30 sec to 1 minute

Reverse Phalen's Test

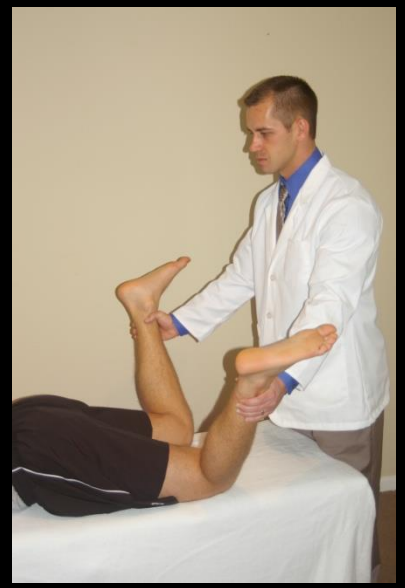
- Carpal Tunnel Syndrome
- The testing positioning is held for 1-2 minutes
  - Some sources say 30 sec to 1 minute

Anthropometry

- Measure circumference 4 inches above and below the elbow
  - Swelling - edema
  - Musculature / atrophy

Hibb's Test

- Tests for Hip Joint Pathology
- Early motion tests the hip
- Late motion tests SI joint
- Better than Patrick's Test
  - Why? (2 reasons)
- Obturator Sign



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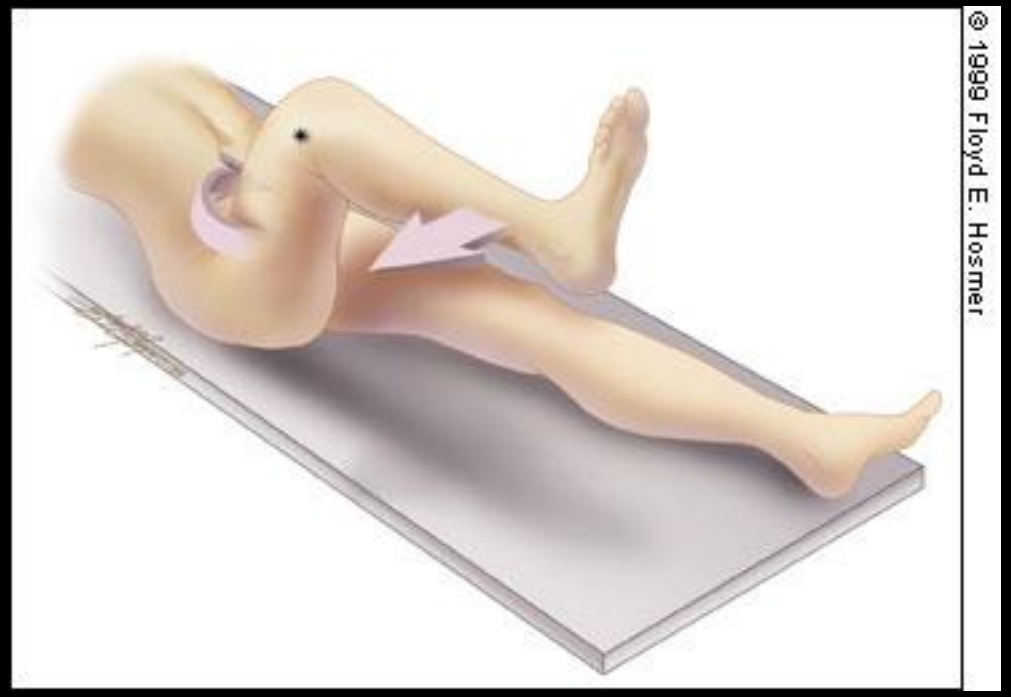
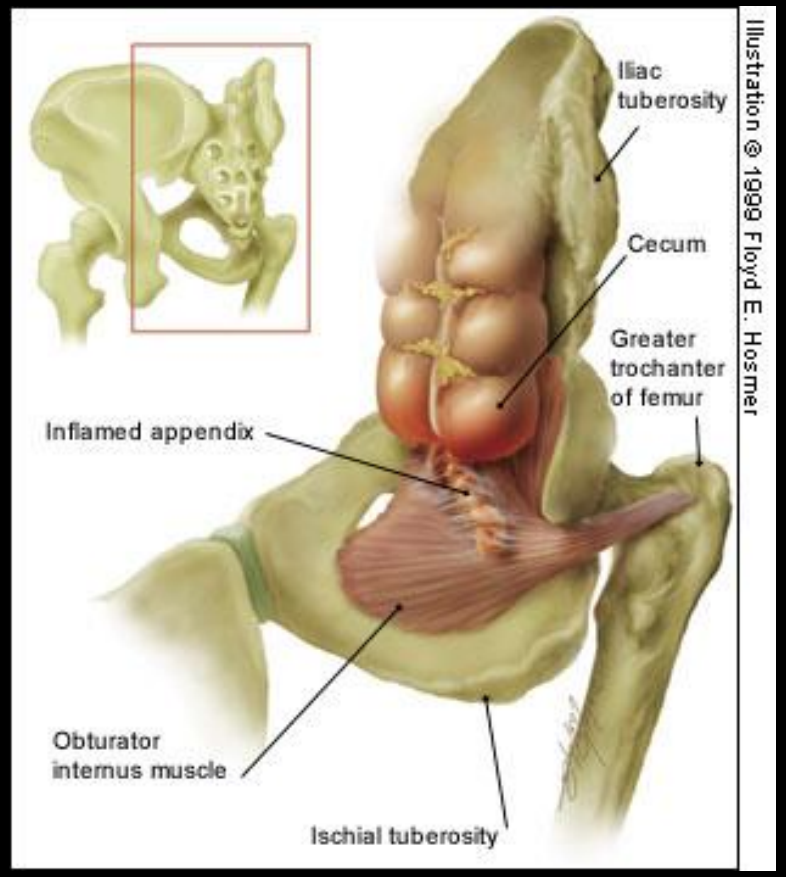
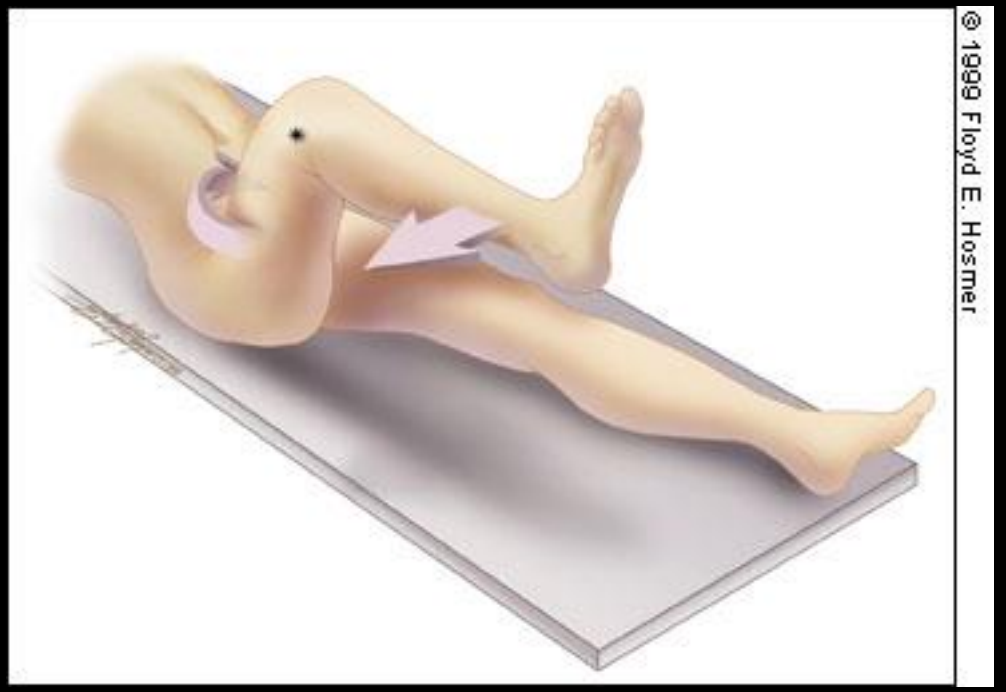
Obturator Sign





Comparison: Hibb's-Obturator



What is wrong with the previous slide?

Tests Replicated or Observed During Hibb's Test

- Obturator Sign

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Patrick's Test

- Hip Joint
- Tests External Rotation
- Less Accurate Than Hibb's
- Internal rotation is usually lost before external rotation
- Obturator Sign

Suprapatellar Compression

- Superficial Patellar Edema
- Clark's/Patellar Grind
- Squat
  - Pressure
  - Quick Test

Valgus Stress Test

- Tests the Medial Collateral Ligament of the Knee
- Better at 30º of Flexion
- Hand placement on lower leg determines the leverage on the joint

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Varus Stress Test

- Tests the lateral Collateral Ligament of the Knee
- Better at 30º of Flexion
- Hand placement on lower leg determines the leverage on the joint

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Lachman's Test

- Testing anterior cruciate ligament
- More accurate than the anterior drawer test
- The lower leg should not touch the table
- Lately I have changed my hand placement. I grasp the tibia with both hands and allow the patient's body weight to be the stabilizing factor to the femur.

Anterior Draw Test

- Tests the Anterior Cruciate Ligament

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Posterior Draw Test

- Tests the Posterior Cruciate Ligament

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Slocum's Test External Tibial Rotation

- Tests anteromedial rotational instability
- Same position as Hughston's Posterolateral Drawer, different direction of rotation/pull
- It is all about the foot placement

Hughston's Posterior Lateral Drawer

- Tests posterolateral rotational instability
- Same position as Slocum's Test External Tibial Rotation, different direction of rotation/pull
- It is all about the foot placement

Slocum’s Test Internal Tibial Rotation

- Tests anterolateral rotational instability
- Same position as Hughston’s Posteromedial Drawer, different direction of rotation /pull
- It is all about the foot placement

Hughston's Posteromedial Drawer

- Tests posteromedial rotational instability
- Same position as Slocum's Test Internal Tibial Rotation, different direction of rotation/pull
- It is all about the foot placement

McMurray's Test

- Tests for Torn Meniscus in the Knee
- Palpate the joint margin while flexing and extending the knee
- Feeling a click may indicate a tear
- The Patient may be More Exact in Reporting a Positive Finding, the doctor may not feel the click

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Thessaly's test

- Meniscal tear
- Better that most meniscal tests
- Weight bearing
- Easier the Duck walking for most patients

Hughston's Plica Test

- Tests for the Presence of a Plica in the Knee
- Very similar to McMurray's Test
- Palpate the medial edge of the patella
- Foot placement is key here as well

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Bounce Home Test

- Tests for Torn Meniscus in the Knee and Joint Locking

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Allis

- For determining structural deficiencies
- The Femoral and Tibial differences can be assessed
  - Picture 1 femoral defect
  - Picture 2 tibial defect

Ankle Anterior Drawer

- Same Principles as any Drawer test
- Anterior Instability

Ankle Posterior Drawer

- Same Principles as any Drawer Test
- Posterior Instability

Ankle Valgus Stress

- Same Principle as any Valgus Stress
- Medial Instability
- Less likely to see due to
  - Malleolus and strength of the deltoid ligament

Ankle Varus Stress

- Same Principle as any Varus Stress
- Lateral Instability
- Medically - a lateral ankle sprain is considered the most common musculoskeletal injury. One in every ten thousand people per day

Anthropometry

Anthropometry

- Six inches above and below the knee for circumference –
  - Musculature - atrophy
  - Swelling - edema

- Leg length
  - ASIS to either malleolus
  - Either works just be consistent
  - This test is far from accurate
  - Extremity alignment study