

Intro to Clinical Assessment – Hip ROM

Recap

- Bony Landmarks
 - ASIS
 - Pubic Symphysis
 - Inguinal Ligament
 - Greater Trochanter
 - Femoroacetabular Joint Line
 - AIIS
 - PSIS
 - Iliac Crest
 - Ischial Tuberosity
 - Sacrum
 - Coccyx
- Anatomy of the Hip
 - Bones
 - Ligaments
 - Bursa
 - Capsule
 - Muscles
 - Tendons

Hip ROM

- Movements
 - Flexion
 - Extension
 - Medial Rotation
 - Lateral Rotation
 - Abduction
 - Adduction
 - Circumduction
 - Combined

Assessment

- Assessing ROM
- Active
 - What can the patient do by themselves?
 - Under their own power?
- Passive
 - What range can be achieved with the therapist taking the weight and producing the movement
- Resisted
 - At the end of range, can the joint protect itself from excessive load and possible dislocation?
 - Not taught until level 5!

Assessment

- Range of Movement
- AROM
 - Always start with uninjured (get your 'normal' baseline)
 - Full range
 - Start in opposite movement
 - Come in to test movement
 - Go back to start
- Hip e.g.
 - Medial Rotation – Lateral Rotation – Medial Rotation
 - Uninjured, then together (if possible)

Range of Motion

- Note for left and right:
 - Full range
 - Pain free
- If not then:
 - What range is achieved?
 - What is stopping them from going further?
 - (i) Pain
 - (ii) Willingness of the patient to move the joint
 - (iii) Strength or tightness of the muscles moving the joint (gravity)
 - (iv) Available ROM of the joint
 - (v) Apprehensiveness of re-injury

- **↓ AROM Extn 5°, P1, BoR**

Hip Flexion

- Range (0-110/120°)
- Starting Position – Supine
 - Extension – Flexion - Extension

Hip Extension

- Range (0-15/20°)
- Starting Position – Prone
 - Hand placed on sacrum to ensure no lumbar spine movement
 - Neutral – Extension - Neutral

Hip Abduction

- Range (0-30/50°)
- Starting Position – Supine
 - Leg dropped over the side of the bed
 - Supported on a stool
 - Full Adduction – Abduction - Adduction

Hip Adduction

- Range (0-30/50°)
- Starting Position – Supine
 - Leg dropped over the side of the bed
 - Supported on a stool
 - Full Abduction – Adduction - Abduction

Hip Medial Rotation

- Range (0-30/40°)
- Starting Position – Supine
 - Knee and Hip Flexed to 90°
 - Full Lateral Rotation – Medial – Lateral

Hip Lateral Rotation

- Range (0-40/60°)
- Starting Position – Supine
 - Knee and Hip Flexed to 90°
 - Full Medial Rotation – Lateral – Medial

Range of Motion

- AROM
 - In supine
 - Flexion
 - Abduction
 - Adduction (?)
 - Medial Rotation
 - Lateral Rotation
- In prone
 - Extension
- Difficult to always assess the full extent/full range in a symptomatic patient (AROM Flex and Ext would require 6 changes of position!)

Passive Range of Motion

- Amount of movement produced without any active participation of the patient
- Can be:
 - Physiological joint movement
 - Accessory joint movement
- Need to look at the following:
 - Quality of movement
 - Range of movement
 - Symptom reaction
 - Need to make sure it is measureable

Passive Range of Motion

- Passive Range of Movement
 - You passively move limb through range.
 - Ask patient to move to their voluntary end of range (if limb too heavy)
- You apply a passive overpressure
- Keep your hands as close to the joint line as possible
- Is it full with typical end feel and pain free?
- **Notation (Tick Tick)**

Passive End Feel

- Nature of resistance that is felt at the end of the ROM
- Every joint has a passive range of motion that exceeds its active range
- Normal feels :
 - Capsular or ligamentous (springy)
 - Firm, leathery sensation at the end of motion. Firm but not hard e.g. shoulder, knee
 - Bony (Hard)
 - Sudden stop e.g. olecranon in olecranon fossa
 - Soft tissue (Soft)
 - Soft at the EOR e.g. flexion of the elbow

Injury changes to “End feel”

- Boggy end feel
 - Effusion
- No end feel
 - This is not common. Due to no resistance to joint movement because the ligamentous and capsular restrictions are gone
- Muscle spasm or apprehension
 - due to pain/fear of re-injury

Passive End Feel

- Hard End Feel
 - Passive Elbow Extension
- Soft End Feel
 - Passive Knee Flexion
- Springy End Feel (Capsular or Ligamentous)
 - Ankle Plantarflexion

Range of Motion

- PROM
 - Passive Overpressure
 - End feel
- In supine
 - Flexion (soft)
 - Abduction (springy)
 - Adduction (?)
 - Medial Rotation (springy)
 - Lateral Rotation (springy)
- In prone
 - Extension (may be springy OR bony Lx)

Range of Motion

- RROM
 - Joints ability to protect itself at the EOR
 - End feel
- Taking note of
 - Pain
 - Strength
 - ✓✓ denotes full strength and no pain in comparison to contralateral limb
 - ↓ p1 denotes pain and reduced strength