Hip Joint

- **Type**
  - Synovial
  - Ball-and-socket
- **Articulation**
  - Head of Femur
  - Acetabulum
    - Horse shaped Art. surface
    - Deficit inferiorly
      - Acetabular Notch
    - Deepened by Acetabular Labrum
    - Transverse Acetabular ligament
      - Close notch
- **Capsule**
  - Medially
    - Attached to Acetabular labrum
  - Lateral
    - attaced to intertrochanteric line
- **Synovial Membrane**
  - Lines capsule
  - Line Part of neck covered by capsule
  - Ensheathes ligament of head of femur
  - Cover fat pad in acetabular fossa
  - Protrudes through gap in anterior wall
  - form psoas bursa
    - Beneath Psoas Tendon
- **Nerve Supply**
  - Femoral
  - Obturator
  - Sciatic
  - Nerve to quadratus Femoris
- **Bursae**
  - Iliopectenial fossa
  - Trochanteric of Gluteus Medius
  - subcotaneous Trochanteric of Gluteus maximus
- **Angle of the hip**
  - **Coxa valga**
    - alteration of the angle
    - axis of neck
    - to axis of shaft
    - so that it exceeds 135 degrees
    - straighter
  - **Coxa vara**
    - alteration of the angle
    - axis of neck
    - to axis of shaft
    - so that it is less than 135 degrees
    - horizontal
- **Ligaments**
  - Iliofemoral
    - Strong
    - inverted Y
    - Base at A.I. iliac spine
    - Y is at upper and lower ends of
    - Intertrochaneric line
    - prevent overextension
  - Pubofemoral
    - Triangular
    - Base at superior ramus
    - Below lower part of Inter.line
    - Limit
      - Extension, Abduction
  - Isciofemoral
    - Spiral
    - base at body of ischum
    - Apex at greater trochater
    - Limit
      - Extension
  - Transverse Acetabular
    - passage of nutrient vessels
    - And nerves
  - Ligament of head of femur
    - Flat triangular
    - Apex at fovea capitis
    - Base at
      - Transverse Acetabular
- **Dislocation**
  - Posterior
    - Nine out of ten
    - limb will be
      - shortened
      - Medially rotated
      - adducted
    - Truma on Knee while thigh flexed at hip
    - Typically in car accidents
  - anterior
    - limb will not be lengthened
    - will be externally rotated
  - Medial or intrapelvic
    - tearing of capsule medially
    - femoral head lies
    - medial to the pubic bone
    - may Cause
      - acetabular fracture
      - rupture of the bladder
  - Congenital
    - common in girls than in boys
    - must be detected early
    - can be easily treated
    - by a few weeks of traction
    - not detected
    - child's hip may develop incorrectly
    - one hip is affected
    - have a limp and lurch
  - acquired
    - extremely painful
    - commonly in car accidents
    - treated by surgical
      - realignment
      - traction
- **Movement**
  - less movable than shoulder
  - Movement sacrificed for Strength
  - **Flexion**
    - Iliopsoas
    - Rectus Femoris
    - Sartorius
    - Adductor muscle
  - **Extension**
    - Gluteus Maximus
    - Hamstring Muscles
  - **Abduction**
    - Gluteus Medius
    - Gluteus Minimus
    - Sartorius
    - tensor Faciae latae
    - Piriformis
  - **Adduction**
    - adductor longus
    - Adductor Brevis
    - Adductor fibers of adductor magnus
    - Assisted by
      - Pectineus
      - Gracilis
  - **Lateral Rotation**
    - obturator internus
    - obturator externus
    - Piriformis
    - Superior and inferior gemelli
    - Quadratus femoris
    - Assisted by
      - Gluteus Maximus
  - **Medial Rotation**
    - ant. fibers Gluteus Medius
    - ant. fibers Gluteus Minimus
    - tensor Faciae latae
  - **Circumduction**