

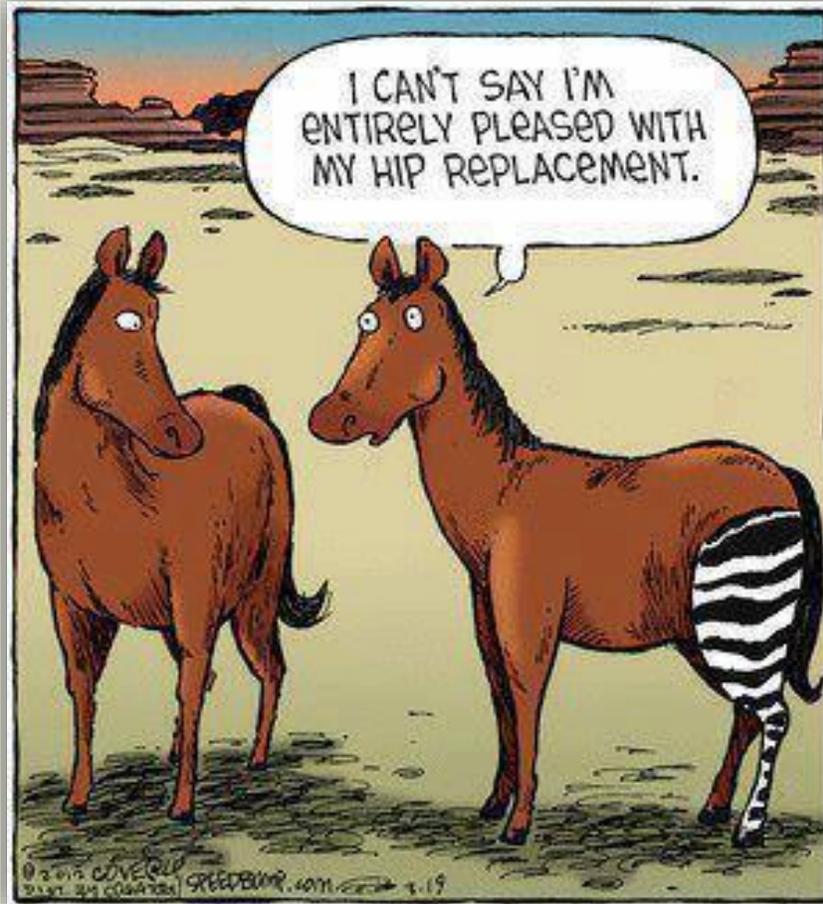


SIMPLE SOLUTIONS FOR HIP PAIN

Lisa Sitek, BSEE, MSPT, CHC
ALL ABOUT YOU PHYSICAL THERAPY, LLC

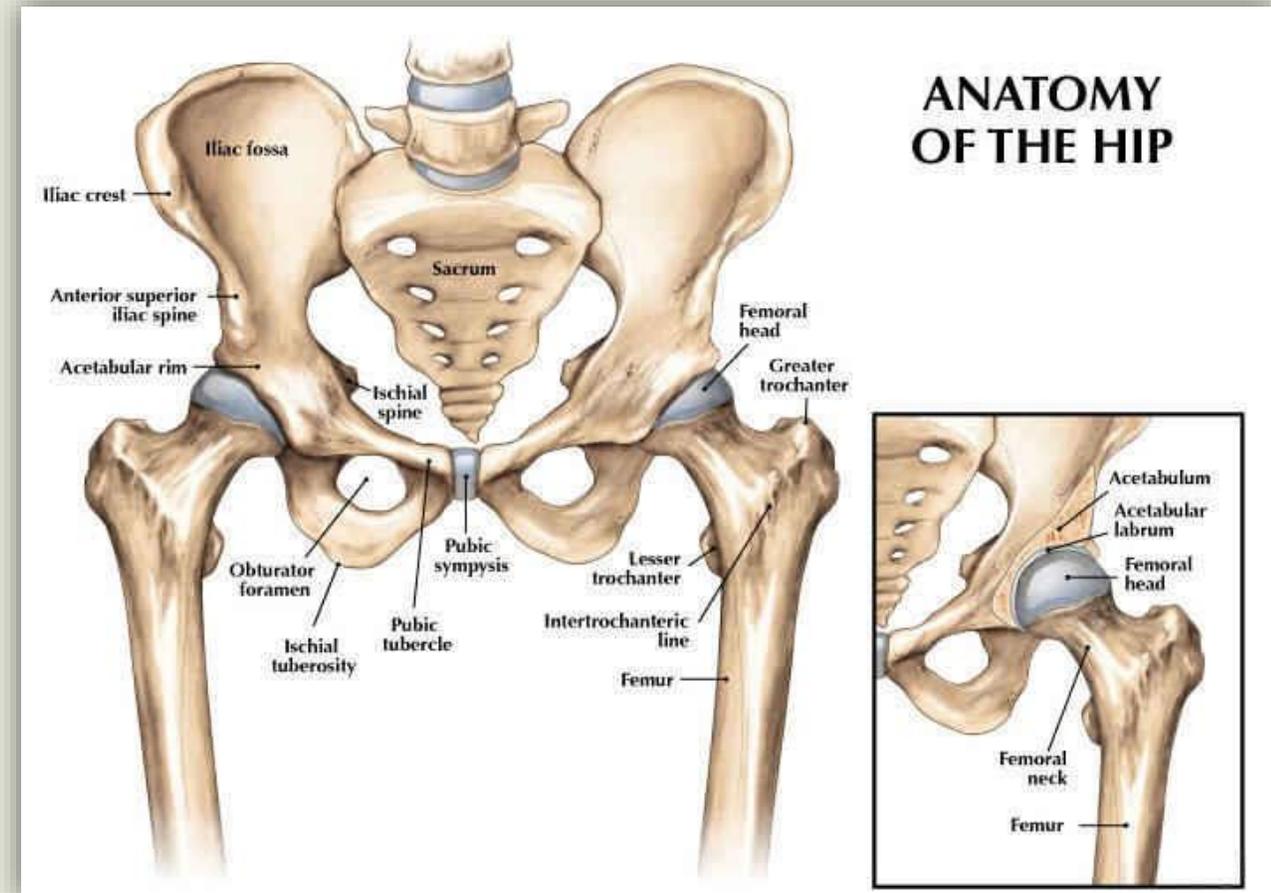
INTRODUCTION OF SPEAKER

- BSEE, successful career in aerospace
- Fitness fanatic
- History of personal injury
- MSPT from UCF 2006
- Private practice

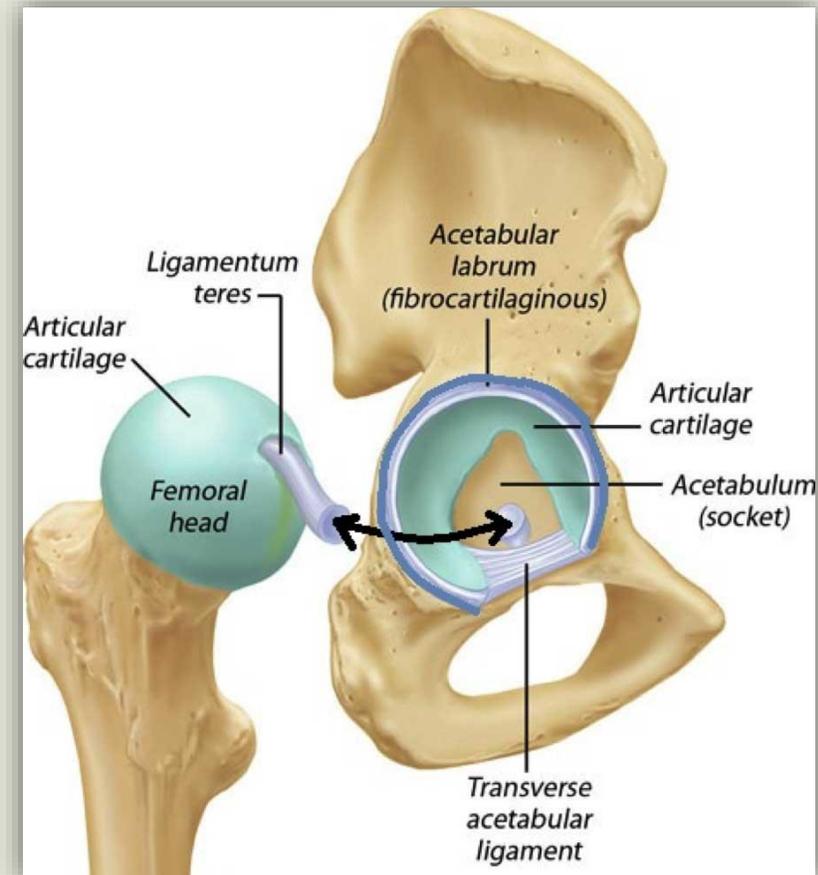
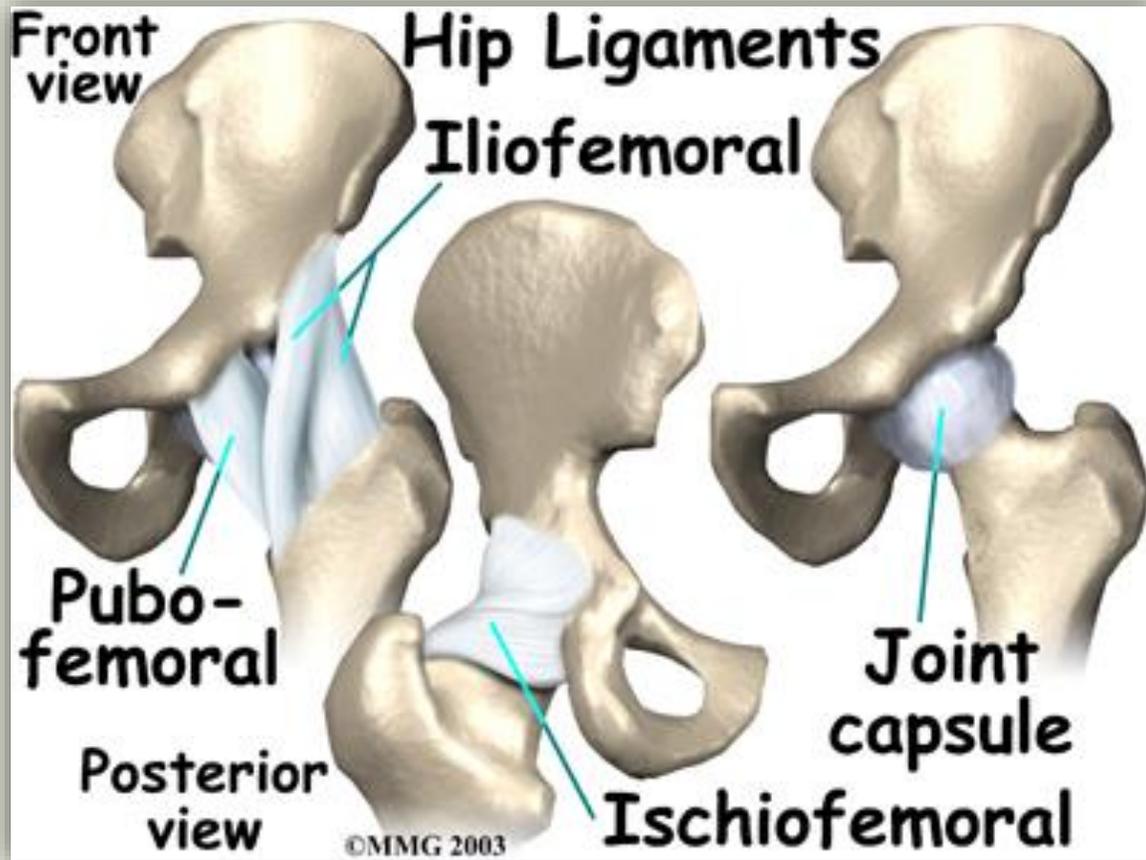


HIP JOINT ANATOMY

- Hip joint is one of the most strong, secure and stable joints in the body
- “Ball and socket” type of joint
 - “Ball” = head of thigh bone (femur)
 - “Socket” = cavity in pelvis (acetabulum)
 - Largest ball and socket joint in body
- Tri-planar motion:
 - Forward/Backward (flexion/extension)
 - Inward/Outward (Adduction/Abduction)
 - Inward twist/Outward twist (Internal rotation/external rotation)



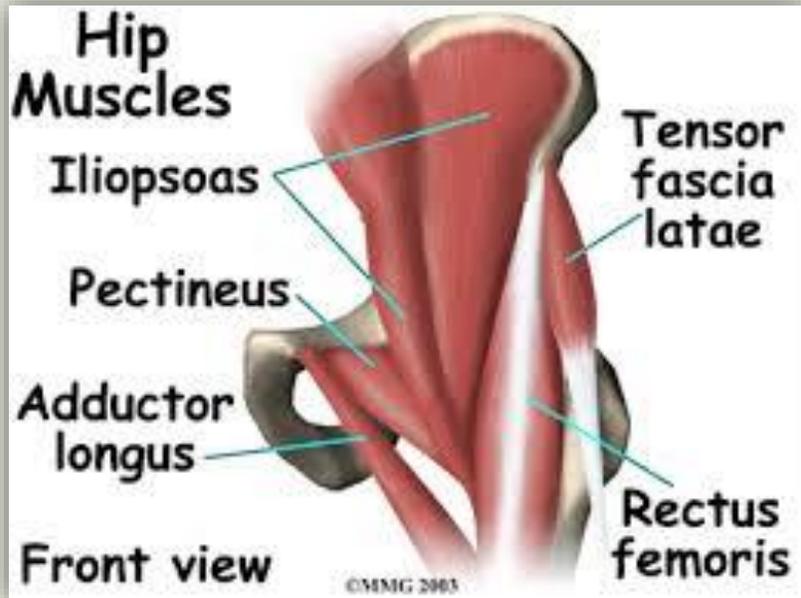
LIGAMENTS AND JOINT CAPSULE OF THE HIP



www.houstonmethodist.org

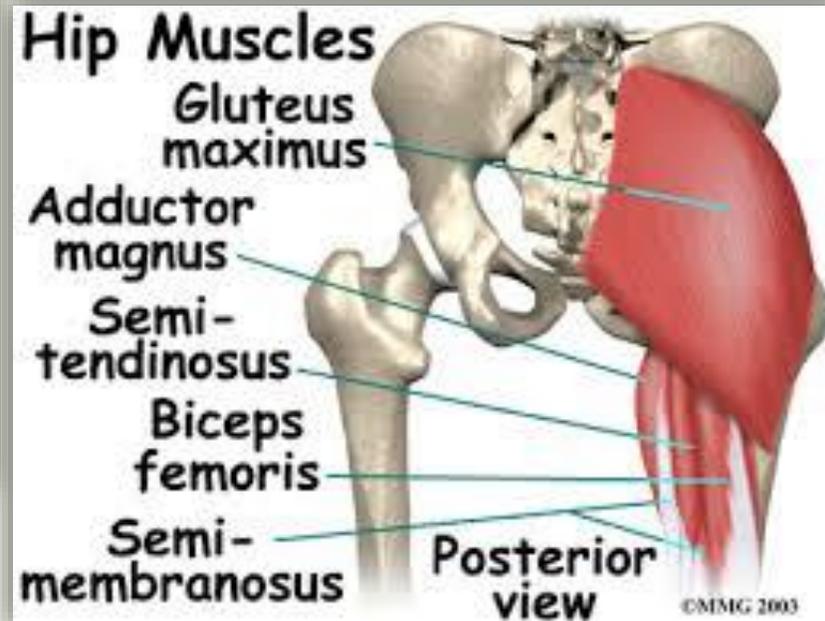
Neckandback.com

MUSCLES OF THE HIP JOINT



www.houstonmethodist.org

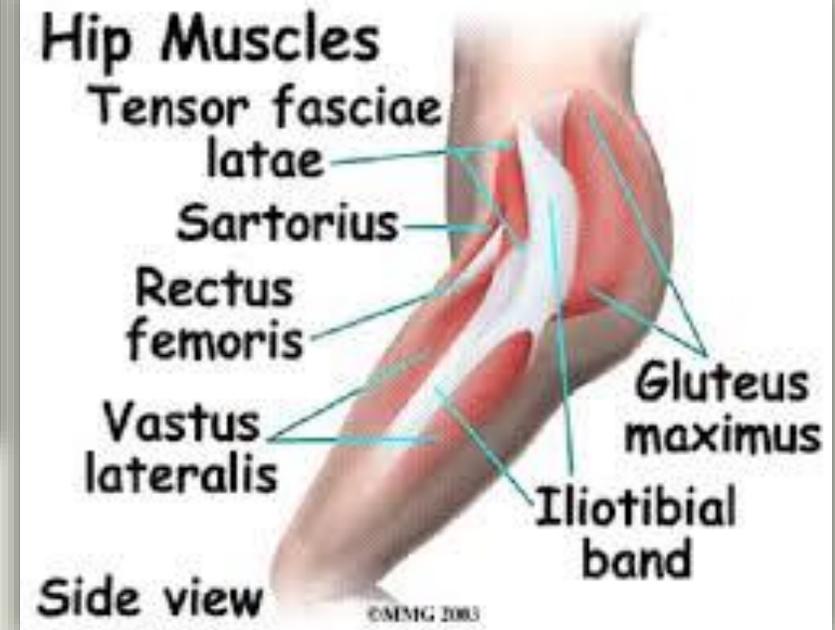
FRONT



www.houstonmethodist.org

BACK

www.arabbones.com



SIDE

BASIC PRINCIPLES FOR MANAGING HIP PAIN

RED FLAGS: Sudden onset of pain after fall, unable to bear weight, unable to move leg or hip, intense pain, loud pop at onset, loss of bowel or bladder function

→ Seek medical attention IMMEDIATELY!!!

- Rest – avoid aggravating activities, such as walking, running or bicycling
- Use a cane or other assistive device if you can't walk without limping
- Ice – apply to painful area for 15 minutes several times per day
- Compression wraps may help decrease pain and swelling
- Over-the-counter pain relievers

COMMON CAUSES OF HIP PAIN

- **Trauma/direct injury – especially falls**
 - Bone fracture (usually top of thigh bone)
 - Dislocation (strong force or hip replacement)
 - Sprains/strains of ligaments or tendons (hamstring/groin)
- **Overuse injuries**
 - Iliotibial Band Syndrome and bursitis
 - Piriformis syndrome
 - Femoral-acetabular impingement (FAI)
- **Referred pain**
 - Hernia
 - “Pinched” nerve (especially L1-2)
- **Aging or “wear and tear”- arthritis**

TRAUMATIC INJURIES – SIGNS & SYMPTOMS

- **Bone fractures – usually due to fall or sharp blow on outside of thigh**
 - Pain located around outer upper thigh or groin
 - Sharp pain with any movement of leg or hip
 - Usually unable to tolerate weight bearing
 - Involved leg may be shorter
- **Dislocation – usually due to automobile collision or fall from significant height**
 - Medical emergency
 - Often involves damage to surrounding nerves, ligaments, tendons and bones
 - Unable to move involved leg
 - May involve loss of sensation in foot or ankle
- **Muscle/tendon strain more common than ligament sprain**
 - More common in athletes and sprinters
 - Localized tenderness, swelling, muscle spasm and bruising
 - Decreased strength and range of motion

TREATMENT – FRACTURES/DISLOCATION/SPRAINS/STRAINS

- **Basic principles**
- **Usually non-weight bearing**
- **Fractures usually require surgical fixation**
- **Dislocations usually require reduction by doctor**
- **Sprains/strains usually resolve with conservative treatment unless severe/ruptured**
- **All will likely require physical therapy except mild sprain/strain**

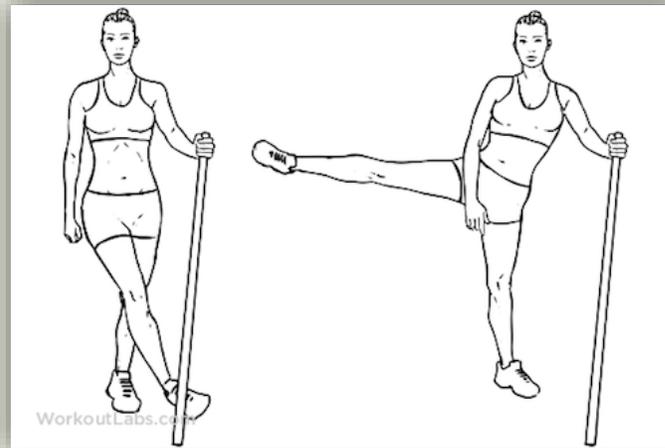
PREVENTION OF SPRAINS/STRAINS

DYNAMIC STRETCHING

- Sprains/strains often occur in sports due to inadequate warm up
- Dynamic stretching before exercise can decrease risk of injury (fluid not ballistic!)
- Static stretching after sports/exercise can lengthen muscle and prevent injury
- Keep muscles strong with regular exercise
- Be sure to return to sports gradually after an injury; allow time for complete healing



Healthyryan.com



Blog.castingnetworks.com

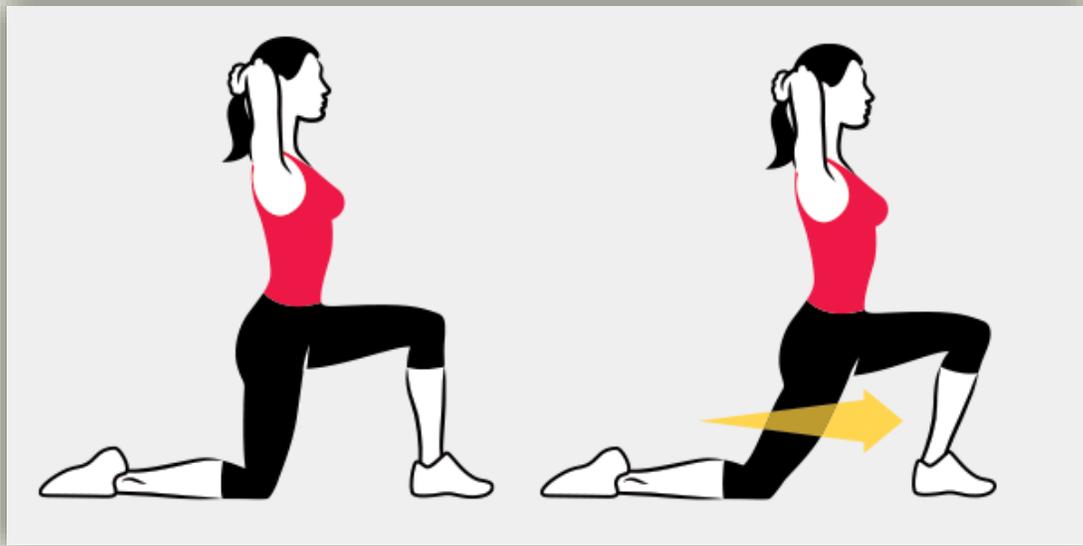


www.more.com

PREVENTION OF SPRAINS/STRAINS

STATIC STRETCHING

Womenshealthmag.com



HIP FLEXOR STRETCH
(Lean forward to feel stretch
on back of straight leg)

Be Gentle!!

- Hold 20-30 sec
- Repeat 2-3 times

Bonesmart.org

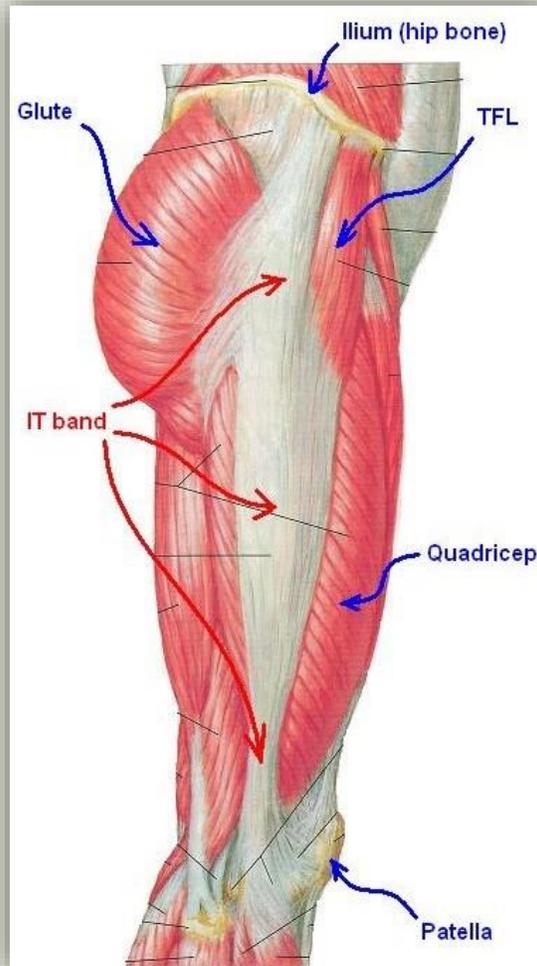


HAM STRETCH
(Lean forward to feel stretch on
back of thigh of straight leg)

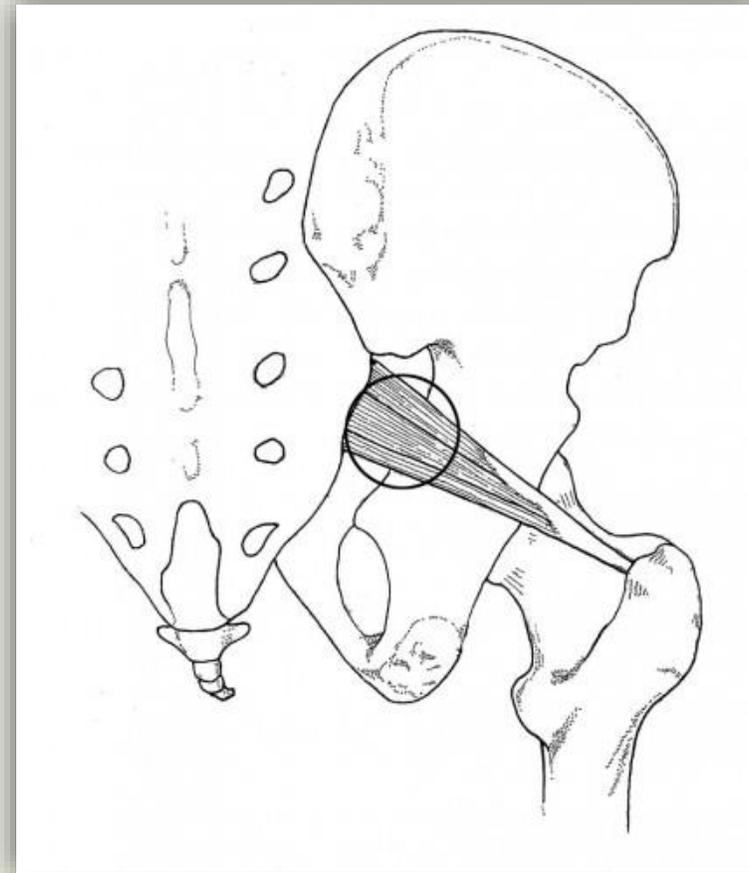
OVERUSE INJURIES – SIGNS & SYMPTOMS

- **Iliotibial Band (ITB) syndrome (AKA trochanteric bursitis)**
 - Pain and tenderness over outer aspect of hip
 - Unable to lie on that side
 - Tightness of ITB
- **Piriformis syndrome**
 - Pain in the butt
 - May have radiating pain down back of leg
 - More pain with sitting than standing
- **Femoral Acetabular Impingement (FAI)**
 - Limited/painful hip motion upward and inward (flexion and internal rotation)
 - Pain with prolonged sitting
 - Groin pain and/or “C” sign

ITB AND PIRIFORMIS



Asmwellness.com



Running.competitor.com

All About You Physical Therapy, LLC

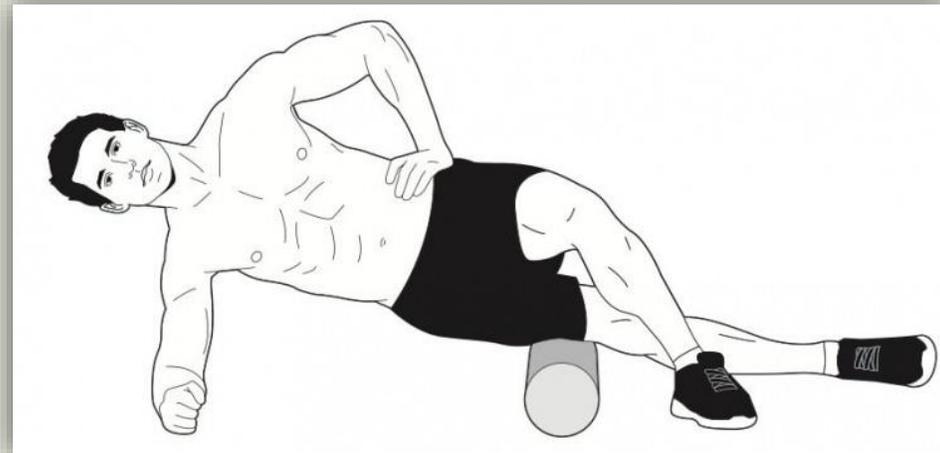
TREATMENT – OVERUSE INJURIES

- **Basic principles – especially rest/training modifications and ice!**
- **ITB Syndrome:**
 - **Foam roll**
 - **Kinesiotape**
 - **ITB stretching (dynamic initially)**
 - **Clamshells**
 - **Corticosteroid injection**
- **Piriformis Syndrome**
 - **Cross-friction massage/ball**
 - **Piriformis stretch**
 - **Single leg squat**
 - **Sciatic nerve glides**
 - **Corticosteroid injection**

TREATMENT – ITB SYNDROME

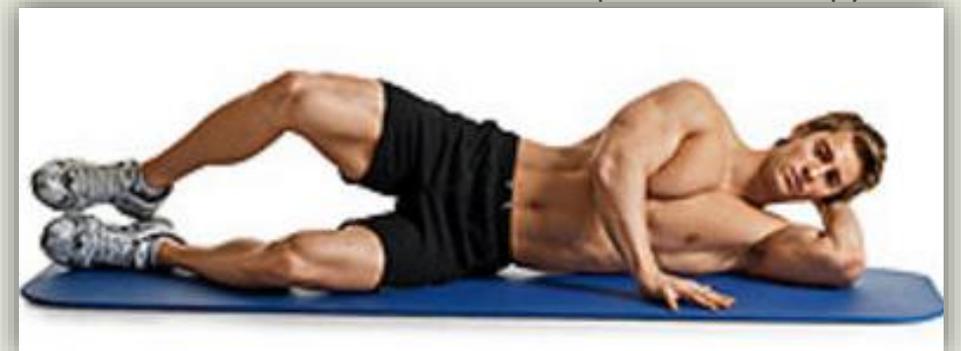


www.nhs.uk



Pilatesplusphysio.wordpress.com

Sportskneetherapy.com



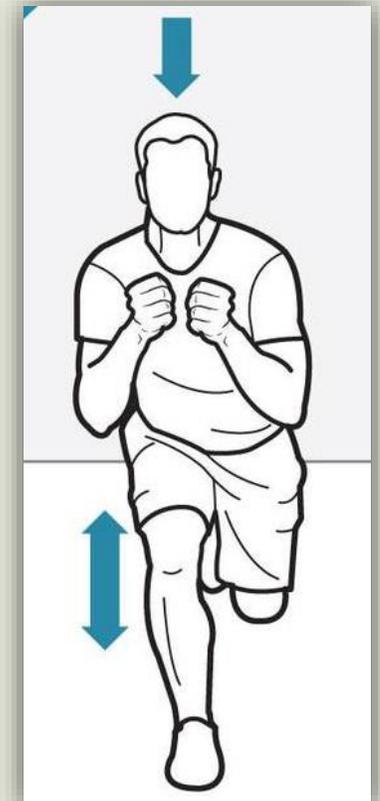
TREATMENT – PIRIFORMIS SYNDROME



Img-seelist.com



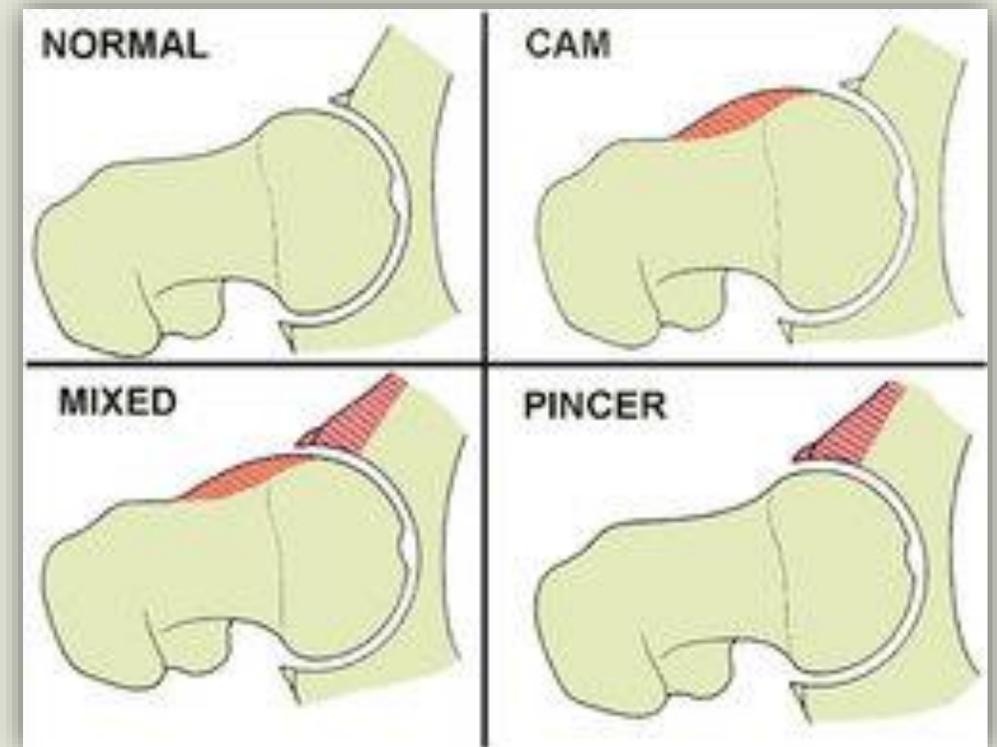
www.youtube.com



Drcaley.com

TREATMENT – FAI

- Activity modification
- Hip joint mobilization
- Stretching of tight tissues
- Strengthening of weak muscles (esp. glutes)
- Patient education and joint protection
 - Avoid recumbent bike
 - Avoid running on TM if labral tear suspected
 - Concrete better shock absorption than asphalt
- May require surgery if conservative treatment fails

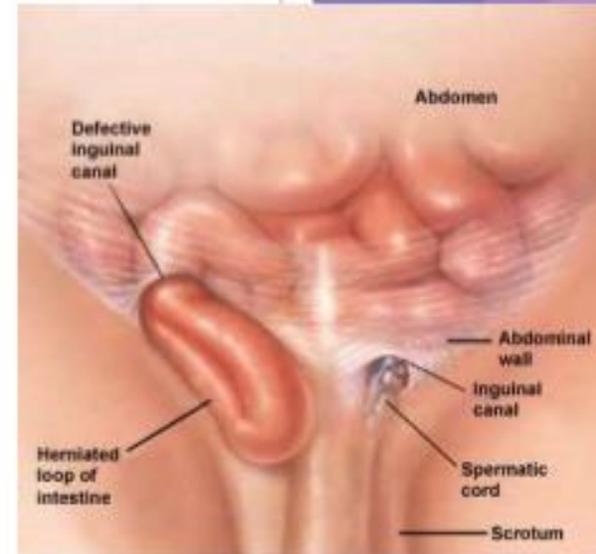


Pelvicpaindifferentiation.weebly.com

HERNIA— SIGNS & SYMPTOMS

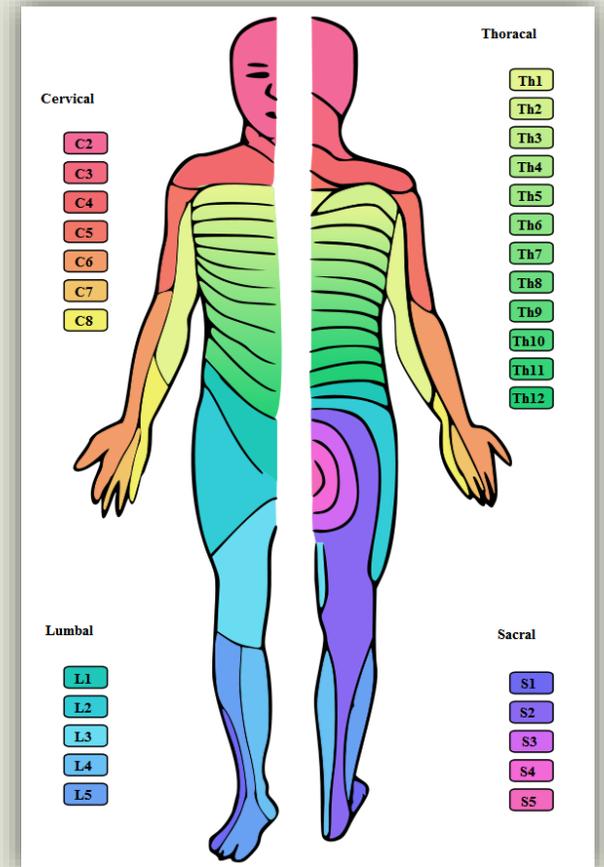
Inguinal hernia signs and symptoms in Adult include:

1. A bulge in the area on either side of your pubic bone
2. A burning, gurgling or aching sensation at the bulge
3. Pain or discomfort in your groin, especially when bending over, coughing or lifting
4. A heavy or dragging sensation in your groin
5. Weakness or pressure in your groin
6. Occasionally, pain and swelling around the testicles when the protruding intestine descends into the scrotum



“PINCHED NERVE” – SIGNS & SYMPTOMS

- Can't put your finger on the pain
- Often pain is related to body position (such as sitting)
- Location of pain depends on which nerve is pinched
 - Back of hip = sciatic nerve (L4-S2)
 - Outside/front = upper lumbar (L1-2)
- Numbness or decreased sensation
- Sharp, aching or burning pain
- Tingling or “pins and needles” sensation
- Muscle weakness



Almostadoc.co.uk

TREATMENT – REFERRED PAIN

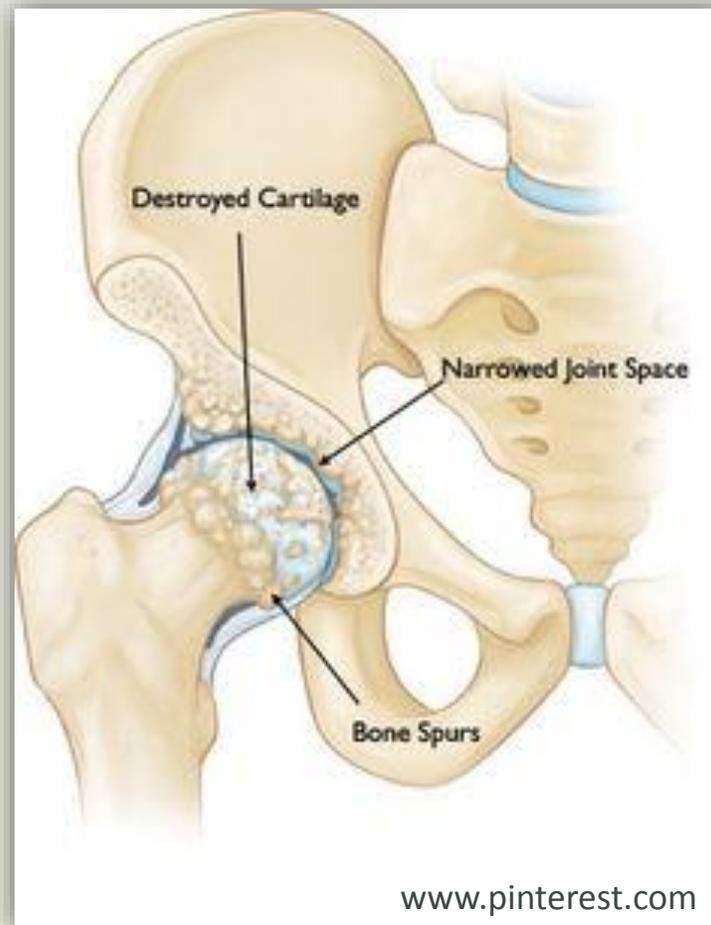
- **Hernias often require surgery**
- **“Pinched nerve” treatment varies widely depending on cause of impingement**
- **Treatment options for pinched nerve include**
 - **Physical therapy**
 - **Massage**
 - **Nerve glides**
 - **Surgery**

THE AGING HIP



- Osteoarthritis (OA) is the most common type of arthritis²
- OA occurs when wear and tear causes damage to the smooth cartilage that cushions the joint surfaces
- OA most frequently affects hips (25%) and knees (44.7 %) over lifetime³
- OA is a progressive degenerative disease affecting approx. 60% of people > 50 yrs⁵
 - Pain and stiffness, typically worst in AM and improving with activity
 - Muscle weakness/atrophy
 - Decreased joint proprioception (affects balance)

OA OF THE HIP



OA TREATMENT

- **Studies show that most forms of exercise have significant (+) effects on pain and function for patients with OA of the hip and knee.**
- **Recent research shows that over time, inactivity actually worsens OA pain.**
- **Combination of pharmacological and non-pharmacological interventions gives best results.**
- **Hip joint replacement surgery increasingly common (> 300,000 in 2010)**
 - **Safe and effective**
 - **Improves quality of life, decreases pain**

HIP REPLACEMENT



www.pinterest.com

OA TREATMENT CONTINUED

- **Effective pharmacological interventions include:**
 - **Analgesics and NSAIDs**
 - **Injections (CSI good for inflammation)**
 - **Topical NSAIDs (e.g., Capsaicin, Voltaren, Flector patches)**
 - **Glucosamine and chondroitin**
- **Effective non-pharmacological interventions include**
 - **Exercise**
 - **Restore muscle balance**
 - **Change from high to low impact**
 - **Education – minimize aggravating activities**
 - **Weight loss**

SUMMARY OF OPTIONS FOR ADDRESSING HIP PAIN

- **Self treatment**
- **Injections**
- **Surgery**
- **Physical therapy**
 - **Assessment for muscle weakness, poor neuromuscular control, hip/ankle issues, root cause**
 - **Pain relief modalities (US, ES, ETPS, MHP, CP)**
 - **Manual therapy (STM, DTM, S-CS, joint mobs)**
 - **Supervised therapeutic exercise and neuromuscular re-education**
 - **Patient education**