

Don't Let Sports Injuries Slow You Down

With Dr. Christian Peterson and Dr. Katherine Fahy



<https://secretseattle.co/seattle-marathon/>

The Sports Medicine Clinic

November 9, 2022

UW Medicine

Christian Peterson, DO and Katherine Fahy, MD



Christian Peterson, DO

- Shoulder and Knee Arthroscopy
 - Bishop Blanchet High School
 - University of Montana
 - KCOM
 - Ohio University
 - The Sports Medicine Clinic



Katherine Fahy, MD

Acting Assistant Professor

Department of Family Medicine/Sports Medicine

- Practices primary care/sports medicine at the UW Sports Medicine Clinic in Ballard
- University of Florida College of Medicine graduate
- Family Medicine residency and Sports Medicine fellowship at UCLA
- Team physician for UW Men's Soccer and Women's Crew and Seattle Pacific University
- Team Physician for FC Ballard alongside Dr. Peterson
- Team physician for Shorecrest High School



Benefits of Exercise in Healthy Aging

- Reduces blood pressure
- Improves cholesterol along with a healthy diet
- Decreased risk of heart disease
- Decreases risk of dementia and falls
- Injury rates are similar to younger adults
- Long-term exercise does not cause degenerative changes in the joints or arthritis



<https://www.rei.com/adventures/trips/weekend/rainier-hiking-camping.html>

Aim for at least 30 minutes of moderate physical activity 5 days weekly
(total of 150 minutes weekly).

Don't Let Sports Injuries Slow you Down

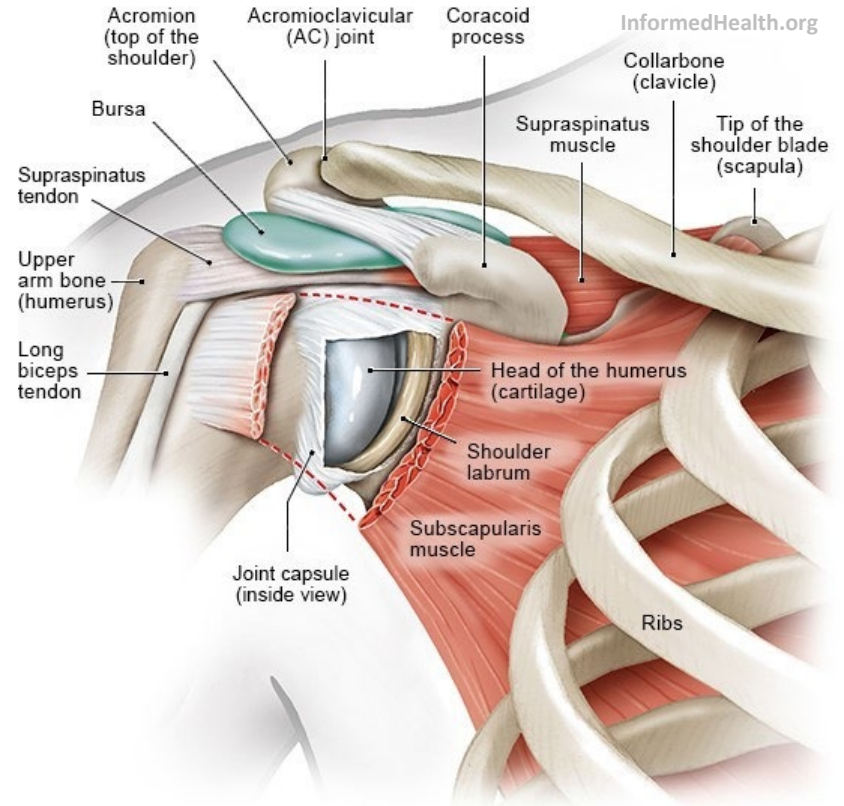
- Shoulder

Recognize the Injury

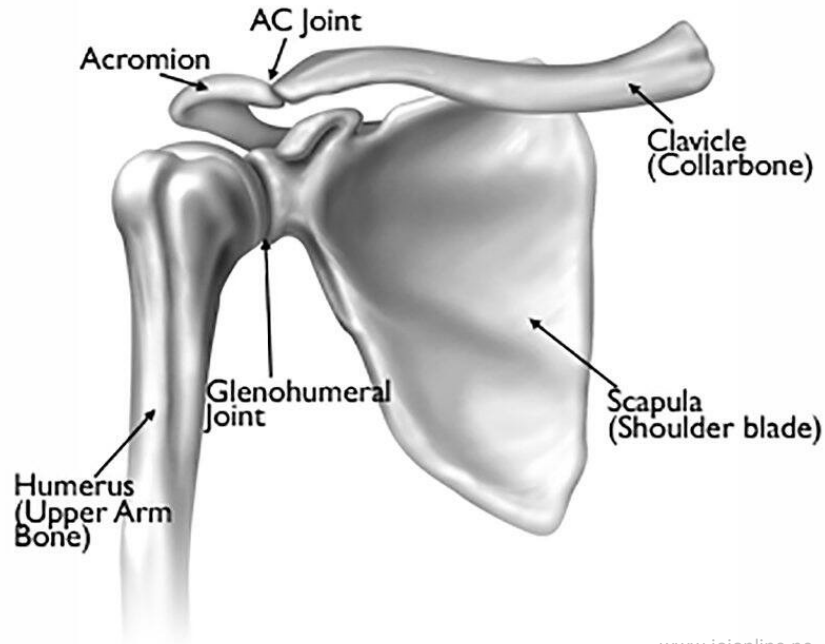
Know the Anatomy

The Shoulder Joint

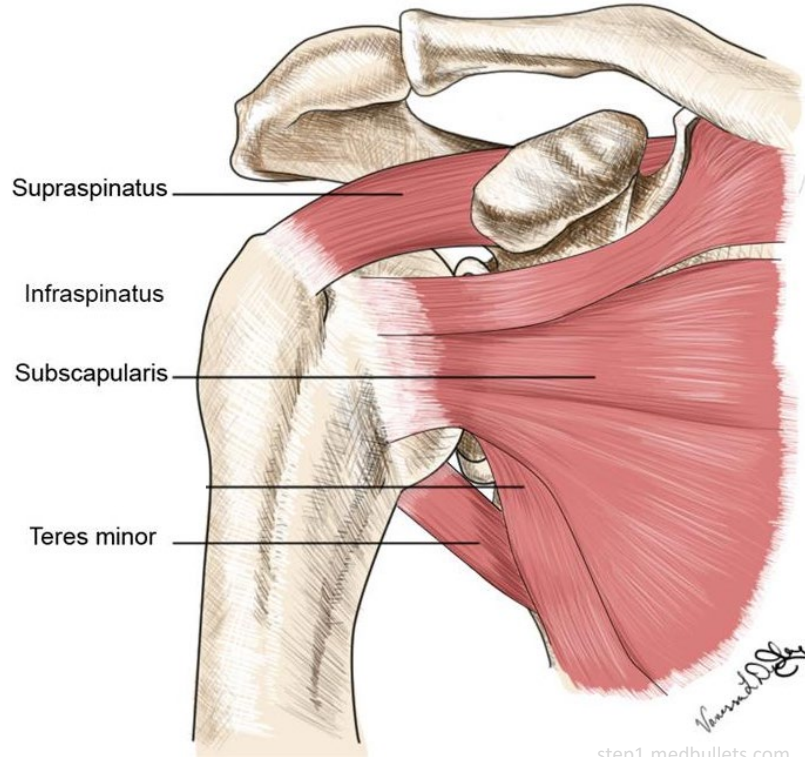
- Very mobile yet stable joint
- Complex interplay of bones, muscles, tendons, ligaments



The Layers of the Shoulder



www.joionline.net



step1.medbullets.com

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Common Problems with the Shoulder Joint

- **Tendons – rotator cuff**
- **Cartilage – arthritis**
- **Ligaments – instability**
- **Capsule – frozen shoulder**
- **Bones – fractures**



Q: What are some initial things that I can do for my shoulder pain before considering surgery?



<https://www.npr.org/sections/health-shots/2017/10/19/558212306/pickleball-for-all-the-cross-generational-power-of-play>

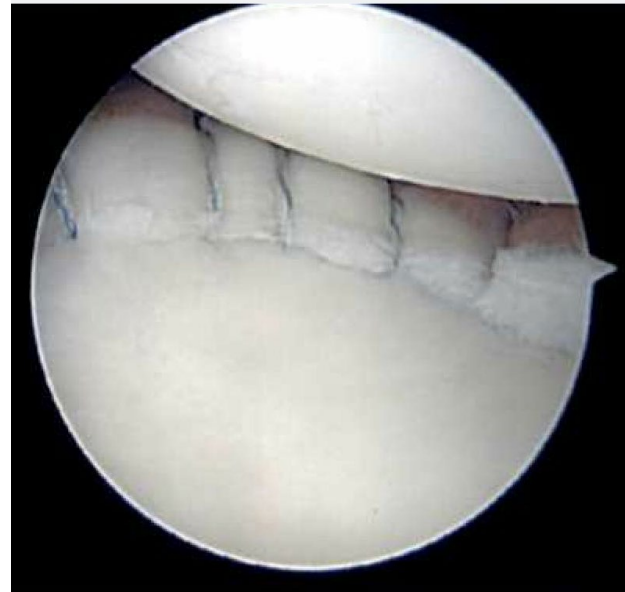
Nonoperative Options

- Physical Therapy and Home Exercises
- Activity Modification
- NSAID's and heat therapy
- Steroid injections in the joint (arthritis, frozen shoulder, labral tears)
- Steroid injections in the subacromial space (bursitis, impingement, rotator cuff disease)
- Platelet rich plasma or autologous blood injections (chronic rotator cuff disease, arthritis)
- Tenex



<https://venturaortho.com/avoid-shoulder-pain-while-playing-golf/>

Arthroscopic Surgery



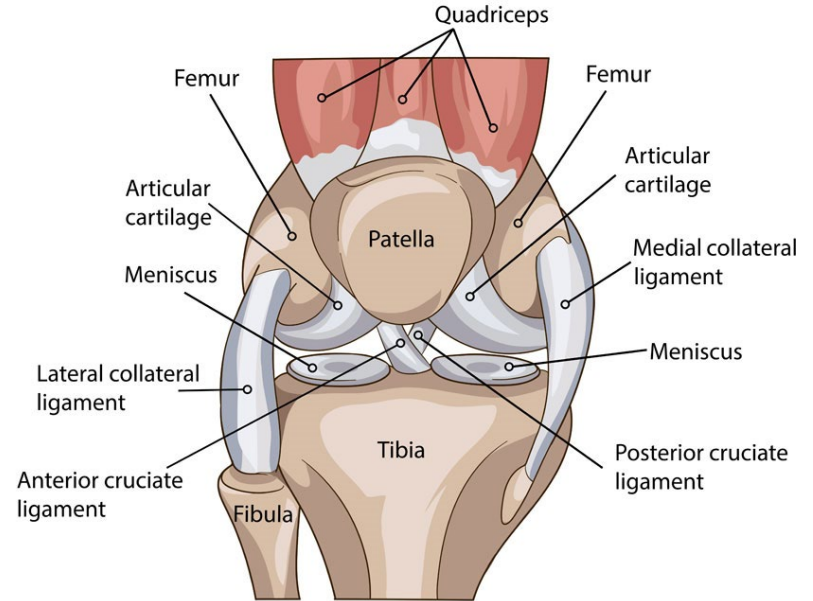
- Special thanks to Dr. Jason Hsu for the use of photos

Don't Let Sports Injuries Slow you Down

- Knee
- Anatomy

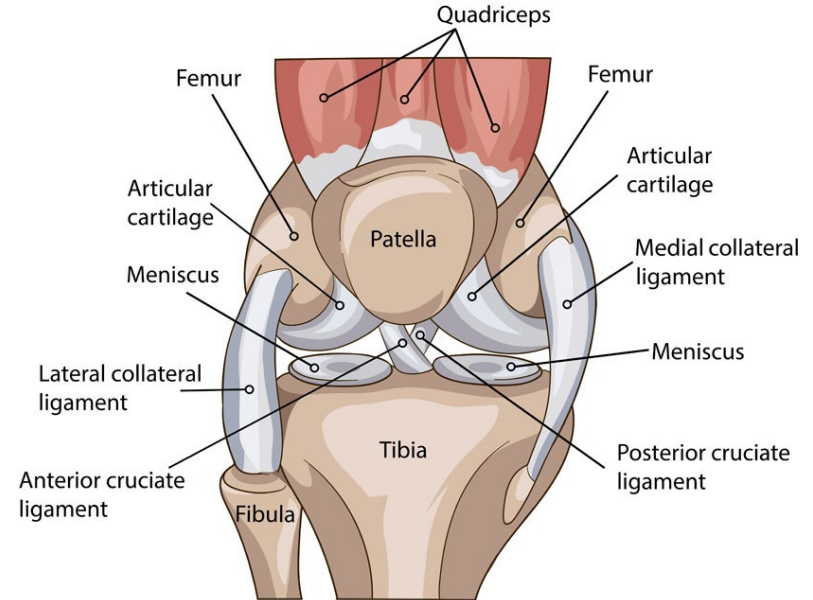
The Knee Joint

- Very stable joint
- Complex interplay of bones, muscles, tendons, ligaments
- Six degrees of freedom



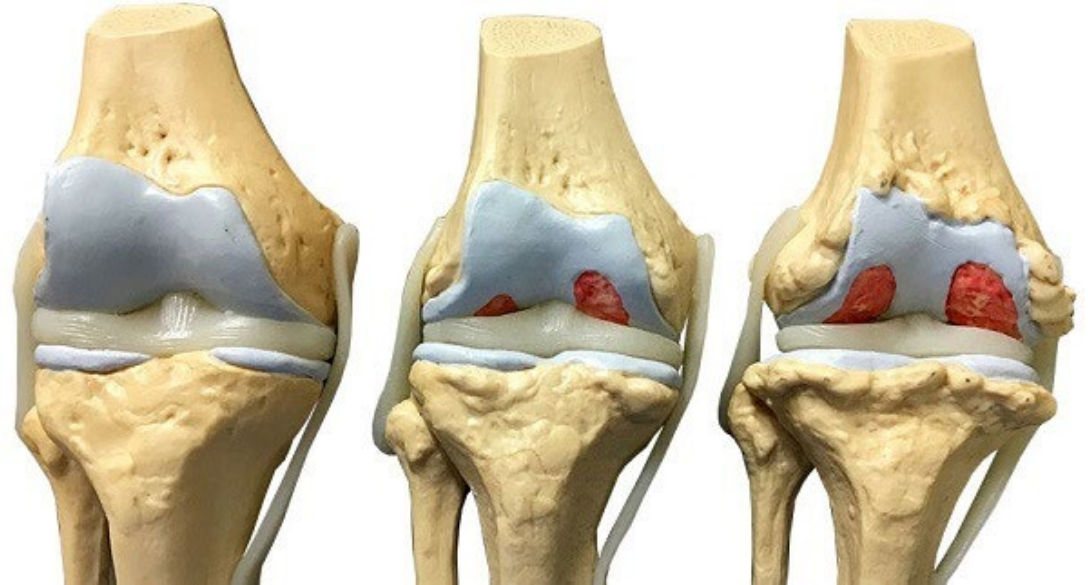
Acute Knee Injuries

- Ligamentous injury
 - ACL- 'Twist and plant' injury
 - PCL- Direct blow to the front of the knee
 - MCL- Outer force applied to the knee
 - LCL- Inner force applied to the knee
- Meniscal Injury- Typically twisting or hyperextension
 - Acute meniscal tear
 - Degenerative meniscal tear
- Cartilage Injury



Chronic Knee Pain

- Knee arthritis
- Baker cyst due to arthritis
- Degenerative meniscal changes
- Chronic tendon injuries



<https://www.knee-pain-explained.com/knee-arthritis-pain.html>

How can you tell what I hurt in my knee when I come in for a visit?

- History
- Physical Exam
- X-rays
- MRI (in some cases)
- CT scan (in some cases)



<https://orthoinfo.aaos.org/en/diseases--conditions/patellar-kneecap-fractures/>

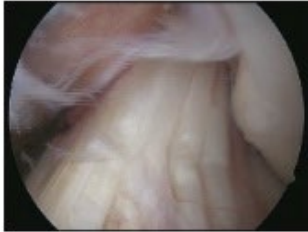
I get knee pain when I run due to arthritis. Is there anything that I can do other than surgery?

- Maintain a healthy weight
- Anti-inflammatory diet and turmeric supplementation
- Stay active and maintain muscle strength
- NSAID's and Tylenol as needed along with heat/ice therapy
- Physical therapy and home exercises
- Injections: Steroid injections, viscosupplementation, platelet rich plasma, stem cell, prolotherapy



<https://www.news-medical.net/health/How-Do-Your-Body-and-Mind-Change-When-You-Start-Running.aspx>

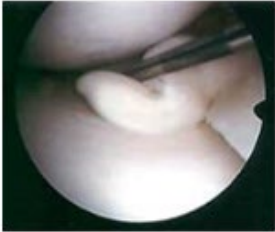
Knee Surgery-Arthroscopy



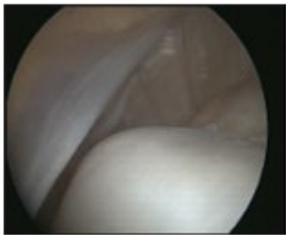
Normal ACL



Torn ACL



Torn meniscus
(cartilage)



Medial plica



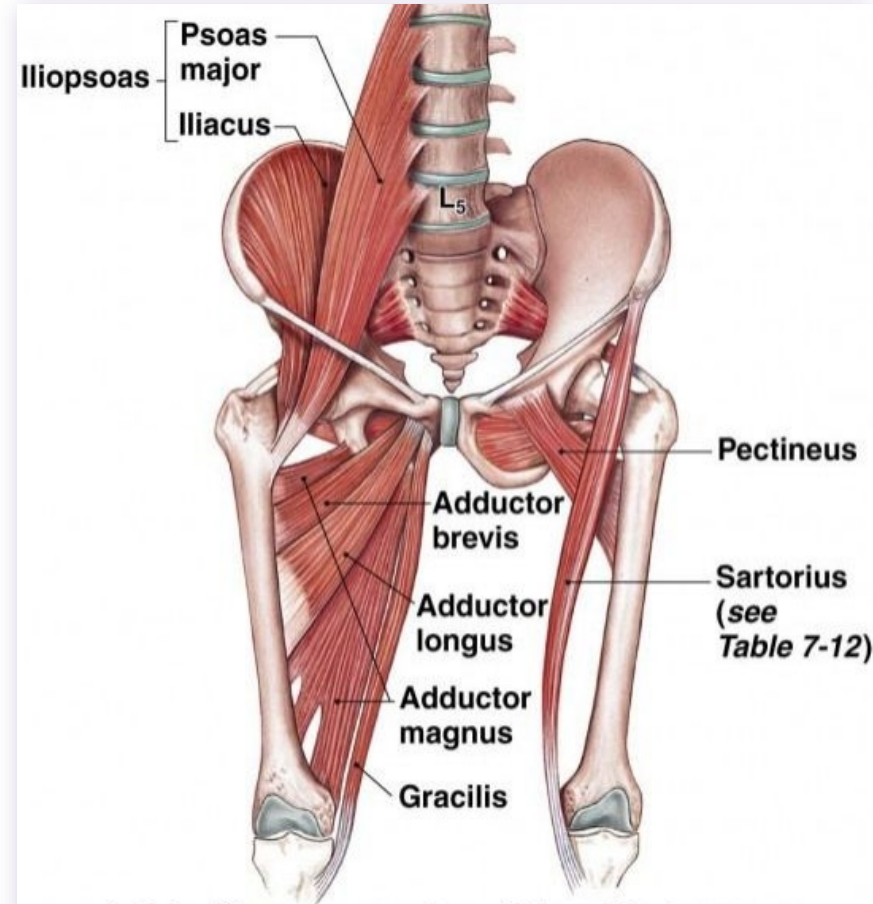
Damage to
articular surface

Overuse Injuries

- Hip
- Anatomy

The Hip Joint

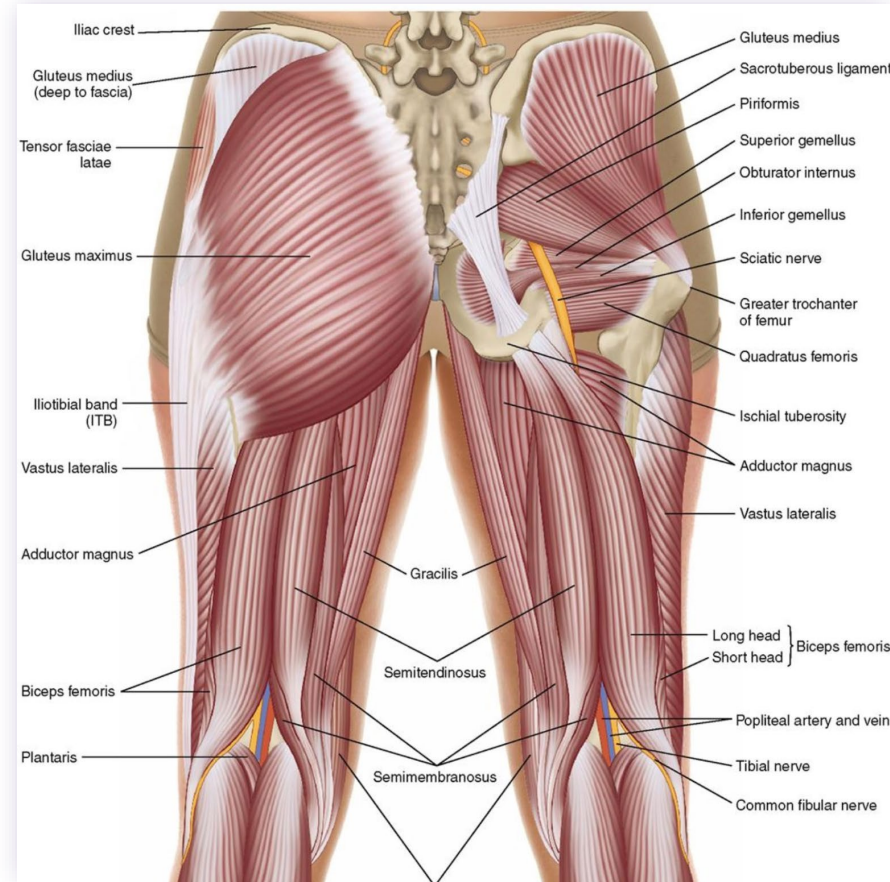
- Anterior View



(c) The Iliopsoas muscle and the adductor group

The Hip Joint

- Posterior view



Acute hip injuries

- Anterior hip:
 - Groin strain, exacerbation of hip arthritis, labral tear
- Lateral hip pain:
 - IT band syndrome, greater trochanteric bursitis, gluteal tendinopathy
- Posterior hip:
 - Hamstring strain or chronic hamstring tendon injury, piriformis syndrome, SI joint injury, low back injury

Are there nonoperative options for hip arthritis or degenerative labral tears?

- Maintain a healthy weight
- Anti-inflammatory diet and turmeric supplementation
- Stay active and maintain muscle strength
- NSAID's and Tylenol as needed along with heat/ice therapy
- Physical therapy and home exercises
- Injections: Steroid injections, viscosupplementation, platelet rich plasma

I pulled my groin (or hamstring/glute) during exercise. What can I do to speed recovery?

- Initial compression and elevation
- Physical therapy
- Home exercises
- Initial rest with gradual return to activity
- Heat therapy
- NSAID's
- Soft tissue techniques



<https://www.veinclinics.com/blog/what-are-health-benefits-elevating-your-legs/>

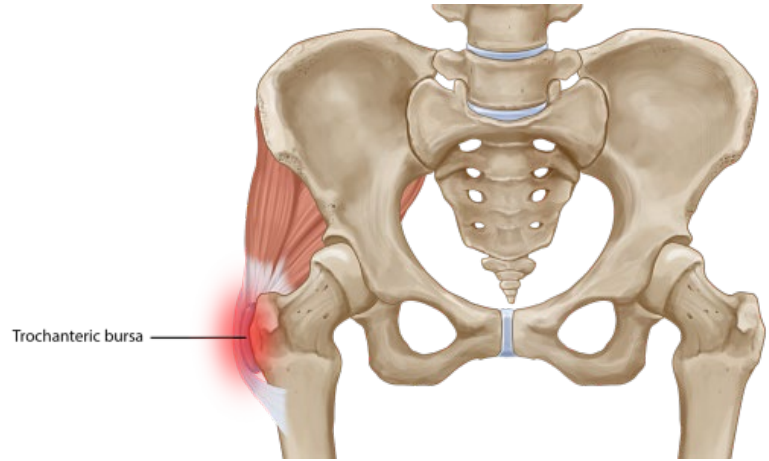
Chronic tendinopathy

Q: I had a tendon strain that has become more chronic pain over the past 6 months. I've tried physical therapy and it's not improving. Are there other options for treatment?

- **Yes!**
 - Percutaneous needle tenotomy
 - Autologous blood injection
 - Platelet rich plasma injection
 - Tenex procedure
 - Surgical referral

Greater trochanteric bursitis

- I have pain right on the side of my hip that is worse when I lie on that side or touch the area. What is wrong with my hip?
- Inflammation of the bursa on the side of the hip
- Caused by weak hip muscles
- Treatment: Physical therapy, home exercises, heat/ice therapy, NSAID's, avoid direct pressure. Cortisone injections if not improving and surgery if not improving with conservative care.



Prevention of Injuries- Nutrition

- Older athletes have lower caloric needs to maintain body mass.
- Individuals who are active require higher amounts of protein than their non-athletic counterparts.
- Sports dietitians can be very helpful.
- Vitamin D and calcium intake should be discussed with your primary care physician. Over-supplementation with calcium can lead to calcium deposits in the walls of your arteries.



<https://blog.nasm.org/sports-nutrition-guide>

Brun SP. Clinical considerations for the ageing athlete. Aust Fam Physician. 2016 Jul;45(7):478-83. PMID: 27610429.

Prevention of Injuries- Dehydration and Heat Illness



<https://atalayar.com/en/content/toughness-titan-desert-race-will-once-again-be-seen-moroccan-territory>

- Thirst decreases with age
- Older athletes produce less sweat than younger athletes in hot and dry environments
- Older athletes are at higher risk of heat illness and dehydration
- Need to balance hydration without overdrinking.
- Measuring pre-exercise and post-exercise weights is the best way to replenish fluid lost.
- Caution exercising in hot and dry conditions.

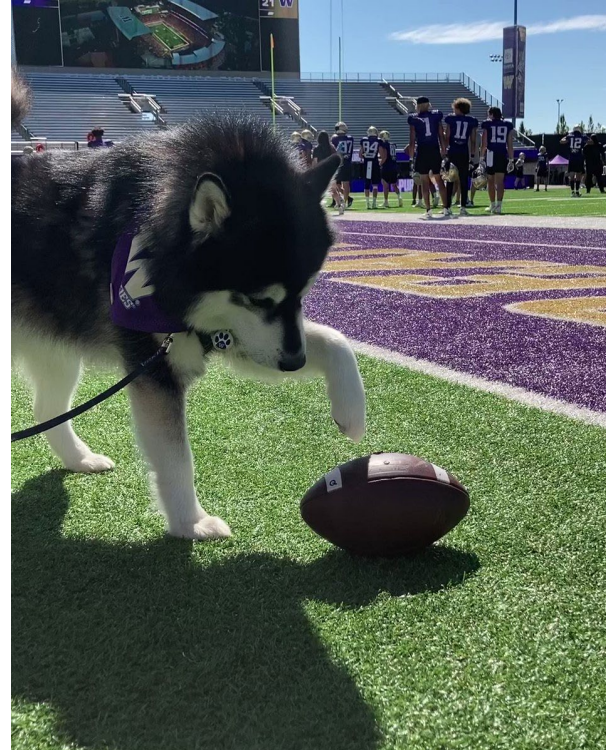
Final Thoughts

- Get in shape for your sport, don't let your sport get you in shape.
- Don't over do it. (10%/week)
- If the pain changes your mechanics-get evaluated.



Helpful Tips for your Appointment

- Please bring all **imaging and reports**.
- Wear loose-fitting clothing to help make the exam easier (ie. tank top if your shoulder hurts, shorts or loose pants for a knee or hip injury).
- Bring a list of questions.



<https://mobile.twitter.com/dubsw>

QUESTIONS?



Shoulder Questions

- How to “heal” rotator cuff injury and avoid surgery?
- Prognosis of partial-thickness supraspinatus tear?
- What is the recovery time after surgery for rotator cuff and labrum?
- What is the most commonly torn tendon?
- I thought my issue was from my playing tennis. Then I switched from side sleeping to back. The pain seems to be gone.

Knee Questions

- I was told I have an insufficiency fracture. What is it?
- I had PRP six months ago and I worked. How soon can I have another injection?
- How Long after surgery before I am able to return to my sport?
- Do I need surgery for my Baker's cyst?

Hip Questions