

Monterey Peninsula Orthopaedic & Sports Medicine Institute



Sports Injuries

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Sports Injuries - Outline

ζ Sports Injuries - an overview

ψ When to see the doctor

ψ Treatment options



Sports Injuries - Outline

ζ Common Sports Related Injuries

ψ Ankle Sprain

ψ Plantar Fasciitis

ψ Tennis Elbow

ψ ACL Injury & meniscus tear



Sports Injuries - Outline

ψ Stress fractures

ψ Overuse Injuries

ψ Shoulder rotator cuff tear

ψ Surgical options



Who is an orthopaedic surgeon?

ζ A Medical Doctor with extensive training in helping you keep your bones, joints, ligaments, muscles, tendons, cartilage and spine in good working order



Educating an Orthopaedic Surgeon

ζ College	4
ζ Medical School	4
ζ Internship	1
ζ General Surgical Residency	1
ζ Orthopaedic Surgical Residency	4
ζ Years in Private Practice	15

7 **Total**

29 years!



Who is an orthopaedic surgeon?

- ζ Greatest knowledge of wide range of conditions and treatment options available
- ζ Greatest experience in treating musculoskeletal health



Why Musculoskeletal Problems?

- ζ Musculoskeletal conditions affect hundreds of millions of people
- ζ \$254 billion per year spent



Acute vs. Overuse Injuries

- ζ Acute - sudden trauma such as sprains, strains, bruises & fractures
- ζ Overuse - series of repeated small injuries

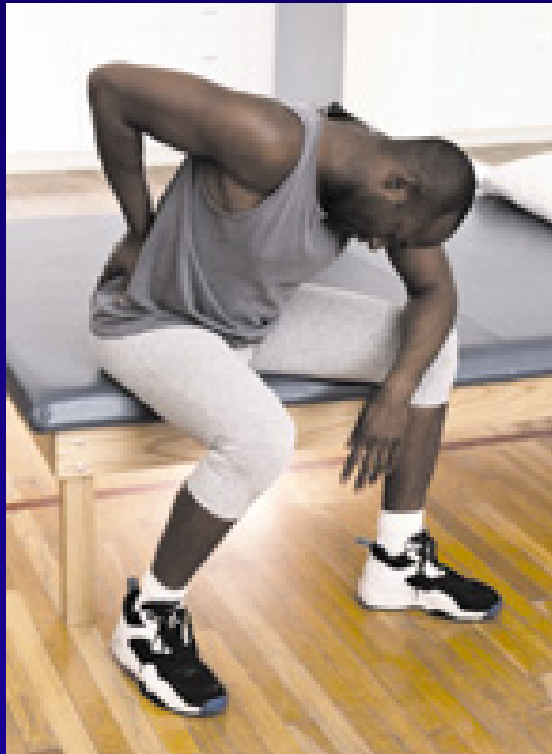


When to See the Doctor

- ζ Decreased ability to play
- ζ Visible deformity
- ζ Severe pain



Boomeritis



- ζ 2009 1.5 million sports related injuries in the U.S.
- ζ \$18 Billion per year

Boomeritis



When to See the Doctor

Before you start an exercise or fitness program, talk to your doctor



Preventing Sports Injuries



ζ Skilled instruction

ζ Wear safety gear!

Stretching

Warm- up:

- ζ Marching
- ζ Walk in place
- ζ Take a warm shower
- ζ Mimic the sport you are about to do



Stretching

- ζ You should NOT feel pain
- ζ Hold stretch 30 seconds
- ζ Relax into the stretch



Sports Injuries Prevention & Treatment



Treatment

ζ R.I.C.E.

ζ Alter or stop sports activities

ζ Physical therapy & medication

ζ Surgery may be warranted



Sports Injuries

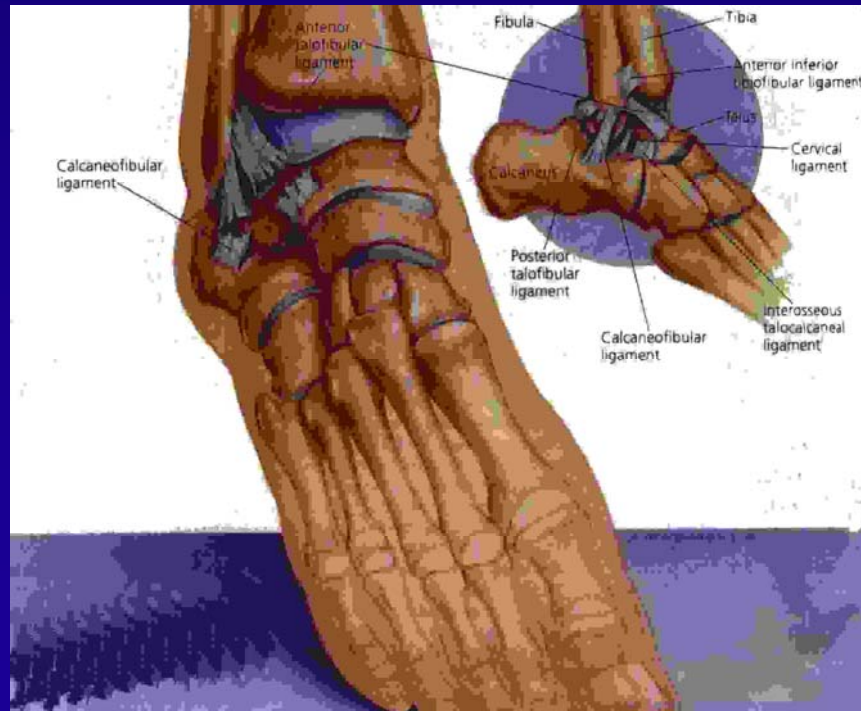
Common Sports Injuries



Ankle Sprain

ζ Ligament injury

ζ Ankle pain, tenderness, swelling



Ankle Sprain

ζ R.I.C.E.

ζ Rehabilitation

ψ ROM

ψ Strengthening

ψ Flexibility

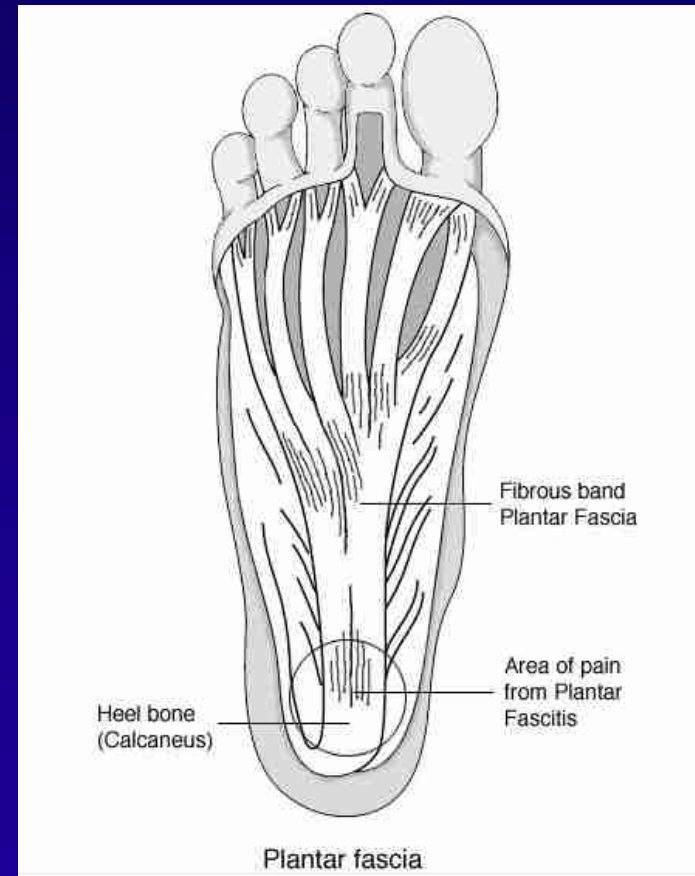
ψ Balance



Plantar Fasciitis

ζ Microtears of plantar fascia

ζ Painful heel



Plantar Fasciitis

ζ Tape heel, arch

ζ Stretch

ψ Against wall

ψ On a step

ζ Heel cup, horseshoe pad



Plantar Fasciitis

- ζ Warm up well before stretching
- ζ Ice heel, 20-30 minutes
- ζ Anti-inflammatory
- ζ Night splints



Plantar Fasciitis

- ζ Wear good, supporting shoes
- ζ Arch support may help
- ζ Avoid activities that cause heel pain

Tennis Elbow



Tennis Elbow

- ζ Warm up, stretch before play
- ζ Correct, maintained equipment
- ζ Condition beforehand
- ζ Evaluate play techniques to minimize irritation



ACL Injuries

- ζ Twisting injury to knee
- ζ Non-contact injury
- ζ Landing on straight leg
- ζ Making abrupt stops



ACL Tear

Normal ACL

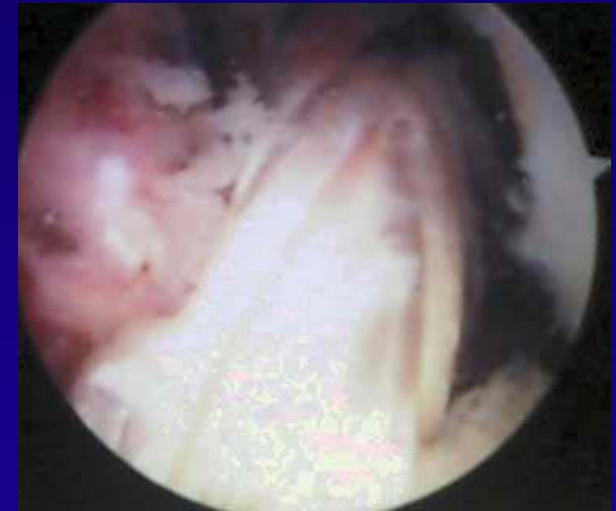


Probe

Chronic ACL tear



Reconstructed ACL



Meniscus Tear



Normal meniscus



Torn meniscus

Stress Fractures

- ζ Imbalance bone loss vs. replacement
- ζ “Micro-cracks”
- ζ Pain



Overuse Injuries

Training errors



Improper technique



Less-than-optimal environment

Overuse Injuries



10% Rule
Don't Increase Activity
by More Than 10% Per Week

Sports Injuries Prevention & Treatment



Asking Questions About Surgery

ζ Why?

ζ Alternatives

ζ Benefits and for how long?



Asking Questions About Surgery

- ζ Risks and any other options?
- ζ What is procedure called?
- ζ How many have you done?
- ζ How do you do the procedure?
- ζ Results?



Asking Questions About Surgery

- ζ Duration of recovery?
- ζ Assistance at home and how long?
- ζ Disability after surgery?
- ζ Physical therapy?
- ζ Return to normal activity?

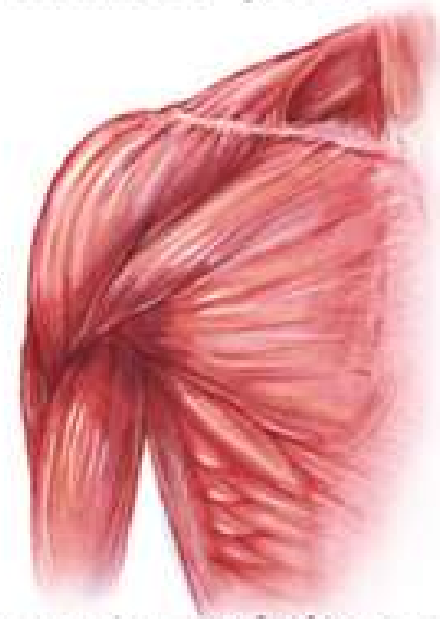




Stabilizers of the shoulder joint



Static stabilizers consist of the shoulder capsule and the labrum.



Dynamic stabilizers are the muscles surrounding the shoulder.

MK Coulton

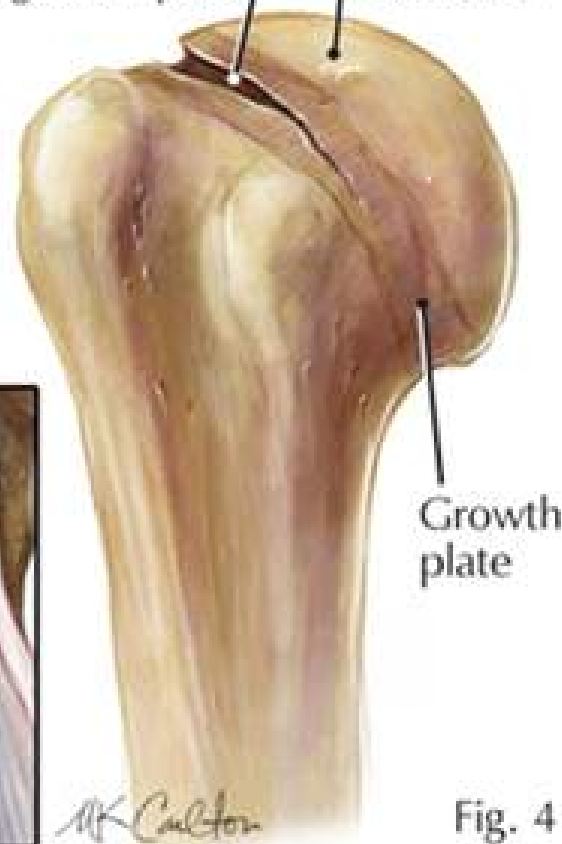
Fig. 3

Shoulder socket shown from side view



Major causes of pain in the thrower's shoulder

Little Leaguer's shoulder
Fracture in the growth plate
Humerus



SLAP lesion



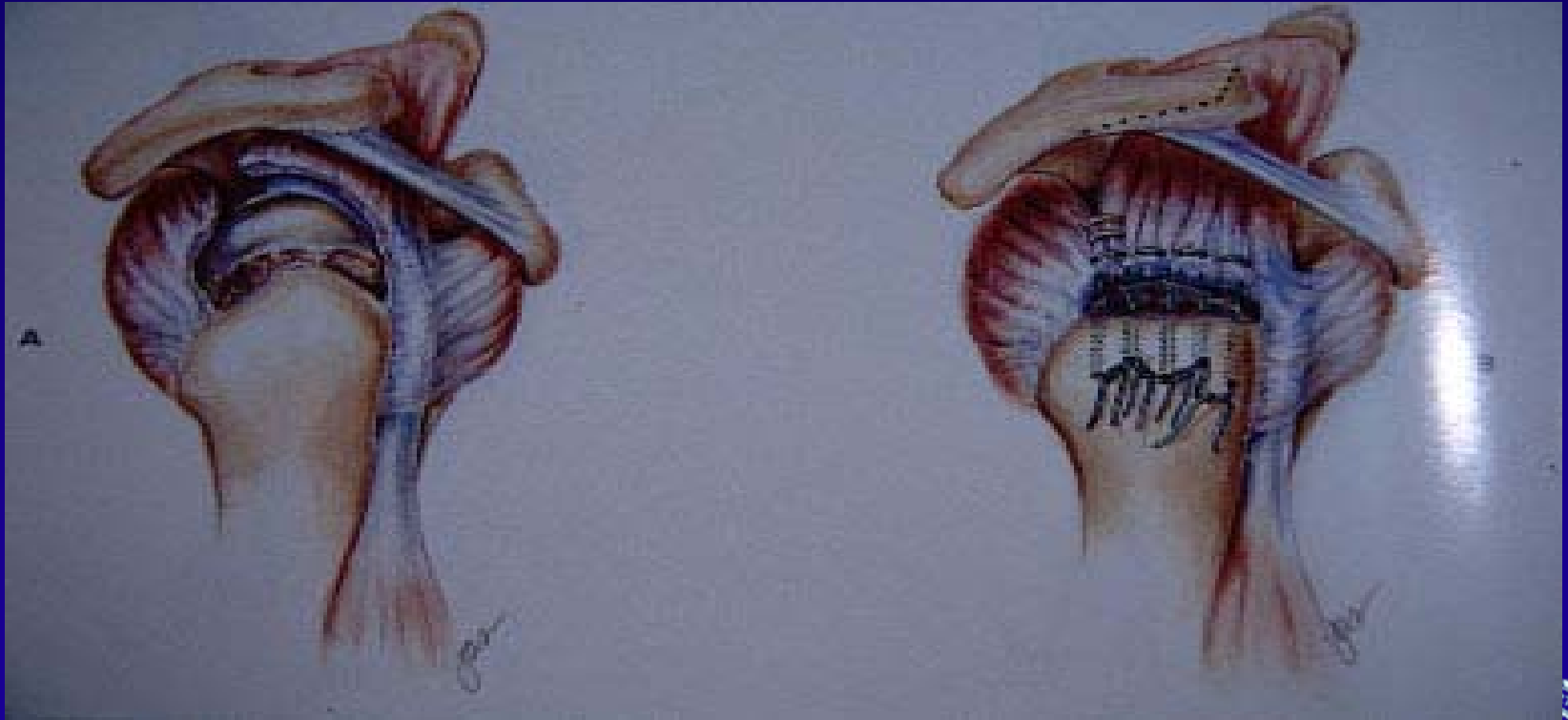
The labrum is torn from front to back (anterior to posterior)

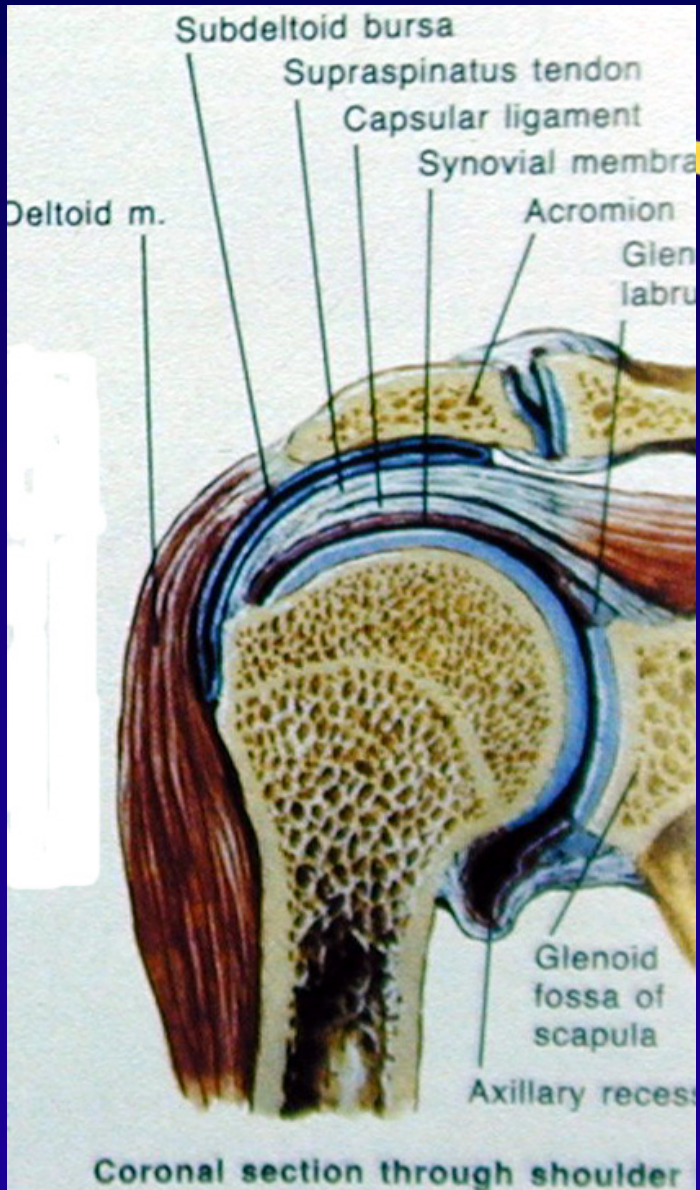
Fig. 4




Rotator Cuff Tear Geometry

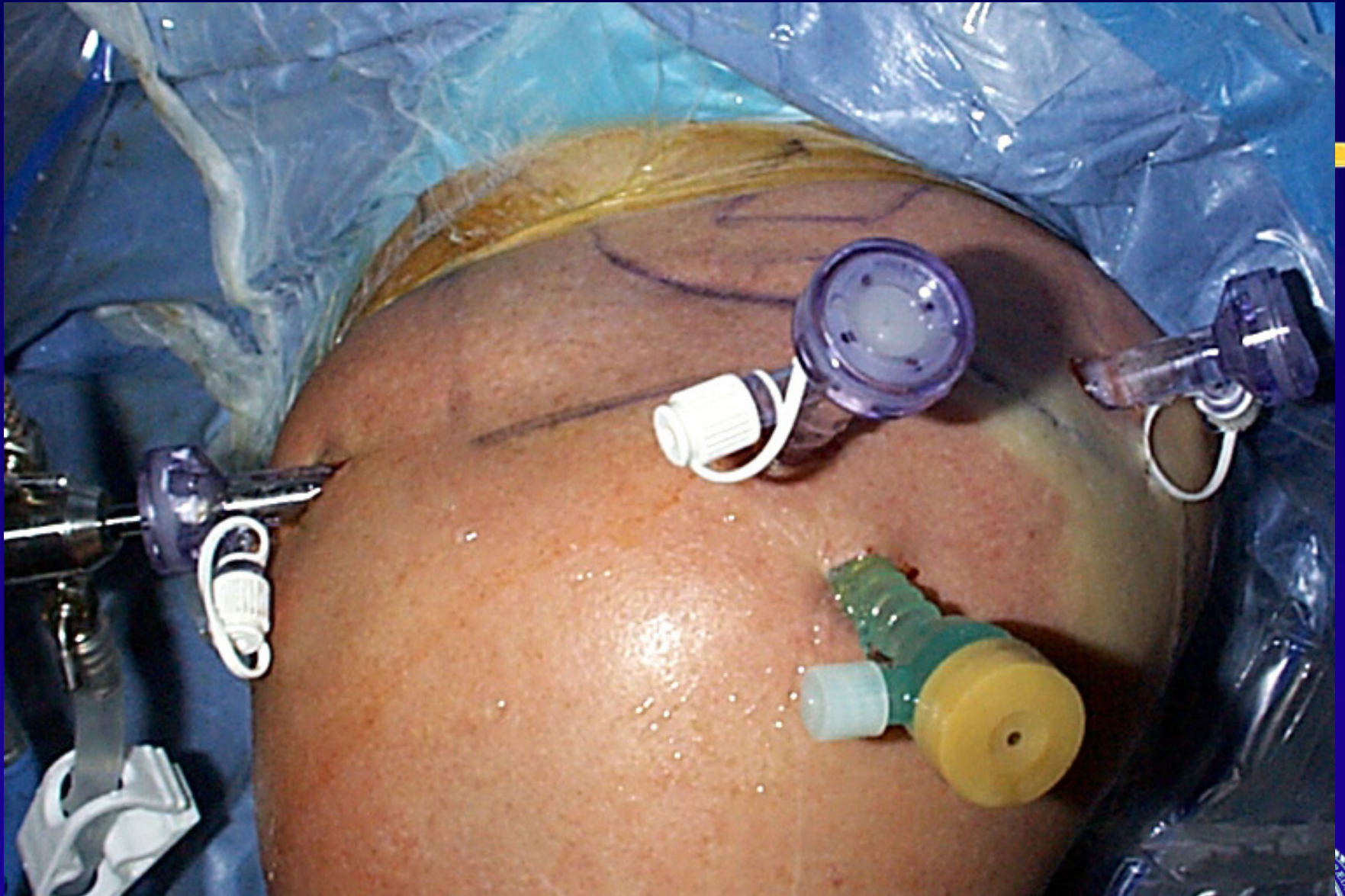
Large - retracted

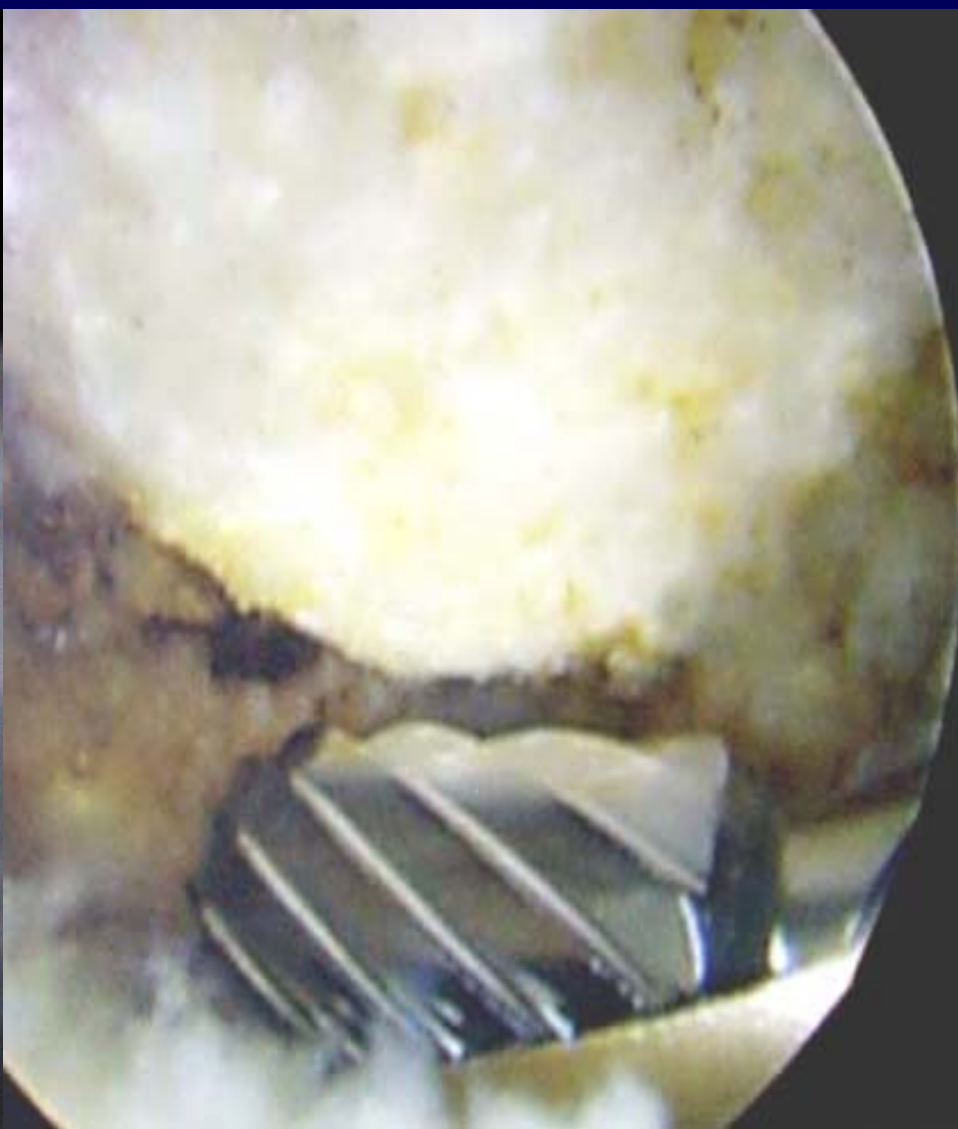




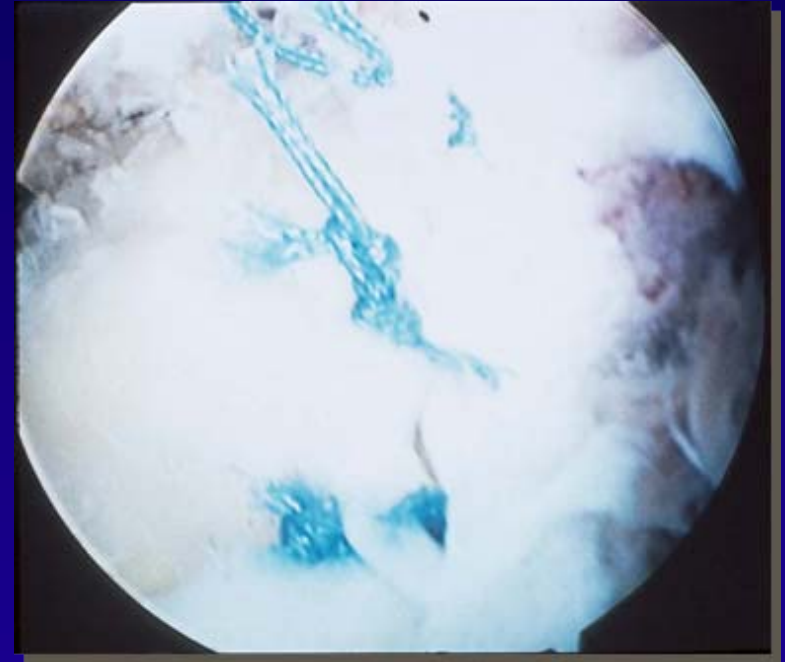
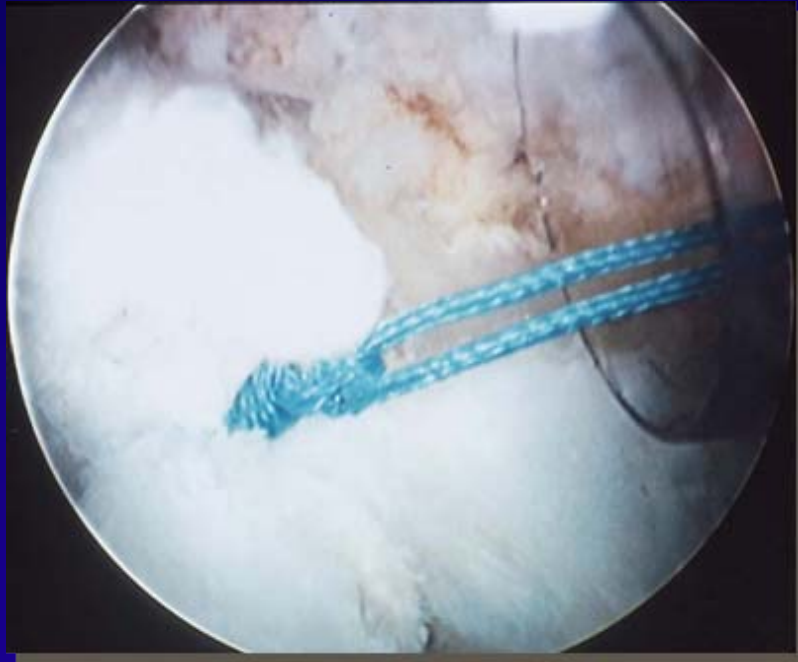


SHOULDER
WORK
1500 FT











Sports Injuries



Sports are fun!

The goal is a pain and injury free
balanced fitness
program for all ages.



Sports Injuries Prevention & Treatment

ψ Thank you for your attention



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