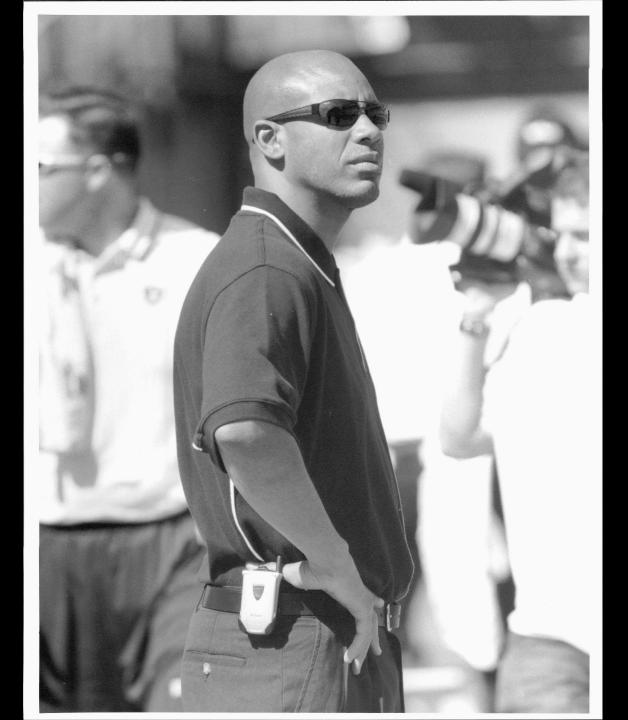


Orthopedic Surgery or Orthopedics or Ortho is a branch of medicine concerned with the care of injuries and illnesses involving the musculoskeletal system.

Sports Medicine is a specialty which involves the prevention, treatment, and rehabilitation of sports and exercise related injuries and illnesses. The goal is to return the injured person to his/her prior level of functioning.

Bones
Muscles
Tendons
Joints
Nerves
Cartilage
Skin
Bursa





PREGAME ROUTINE



A HERO WILL RISE



GLADIATOR





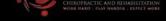
GAMETIME

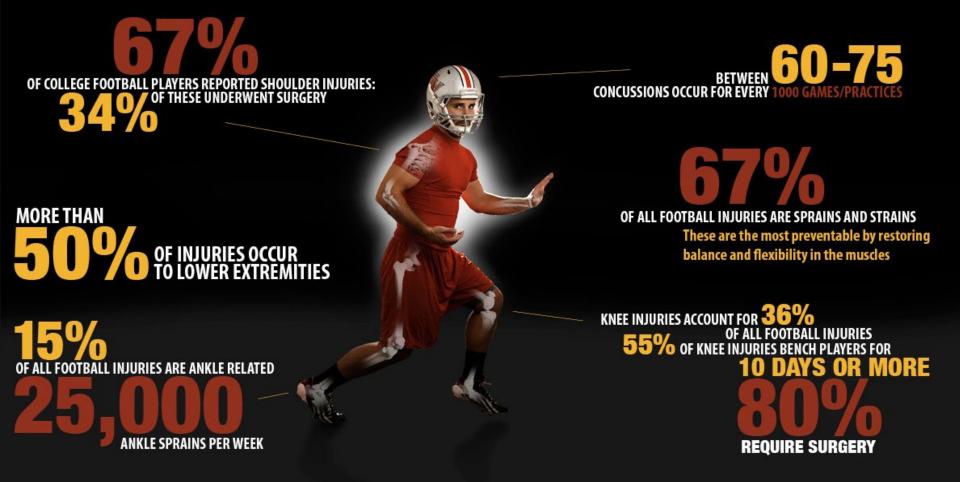






500,000 football injuries occur each year: 2 x as many as any other sport

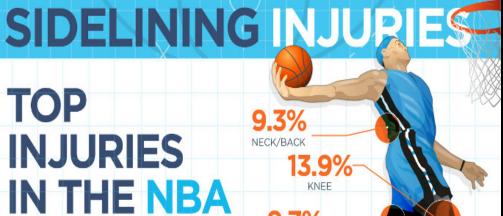




STOP INJURIES BEFORE THEY OCCUR

Functional Movement System (FMS) screening can identify musculoskeletal asymmetries known to increase the likelihood of injury.

LEARN MORE ABOUT FMS
AND SCHEDULE A FREE SCREENING AT
www.TeamChiroDM.com/FMS



FOR 2014-2015 **NBA REGULAR SEASON**



9.3% NECK/BACK 13.9% KNEE 9.7% THIGH

19.5% ANKLE





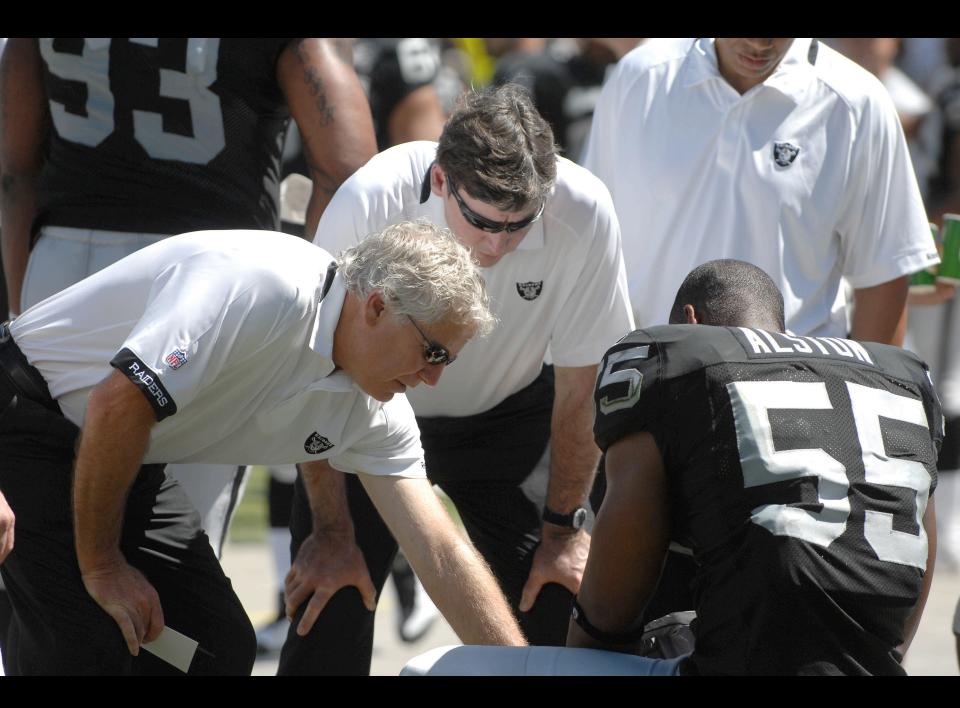
SIDELINING IN JURIES

AMONG ADULTS

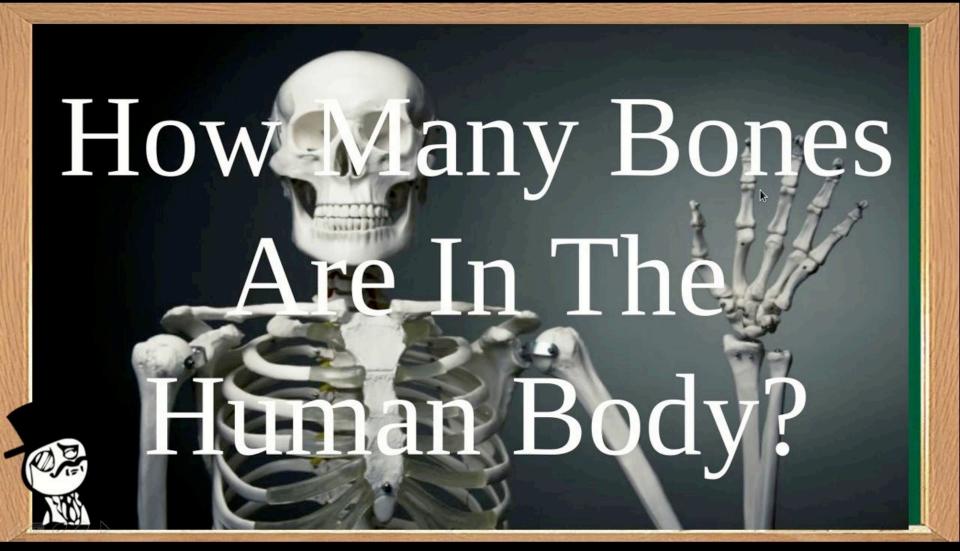
AGES 25-40, the most common injuries in baseball, soccer and softball were fractured or sprained ankles and knees







education



Skull Cranium Spinal Column Cervic al Vertebrae (1-vii) Man dib le Thorac ic Vertebrae (TI-TXII) Clavicle Manubrium Scapula Stemum Ribs Lumbar Humerus Vertebrae (LI-LV) Ulna Radius Pelvic girdle Sacrum Coccyx Carpals Metacarpals Phalanges Femur Patella Tibia Fibula

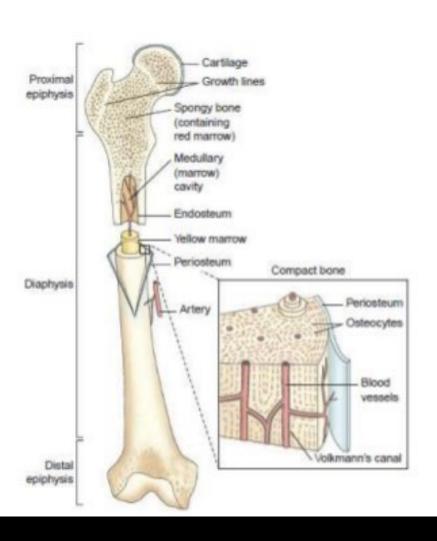
Phalanges

80 axial

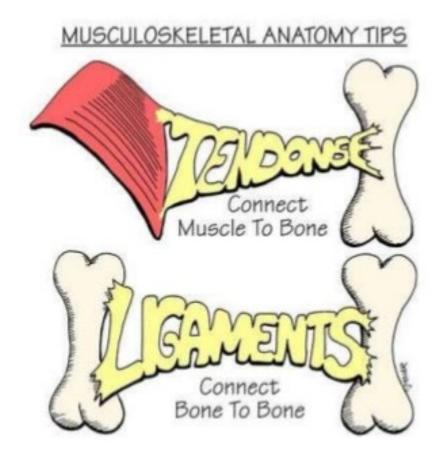
206

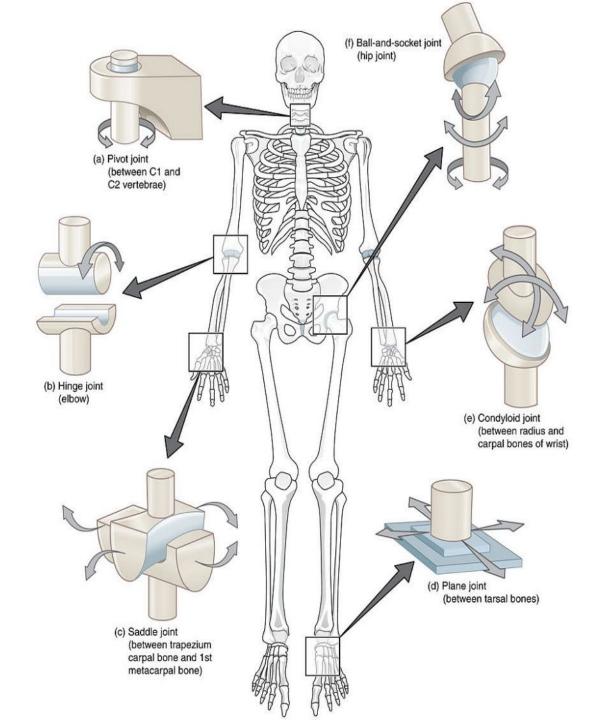
126
appendicular

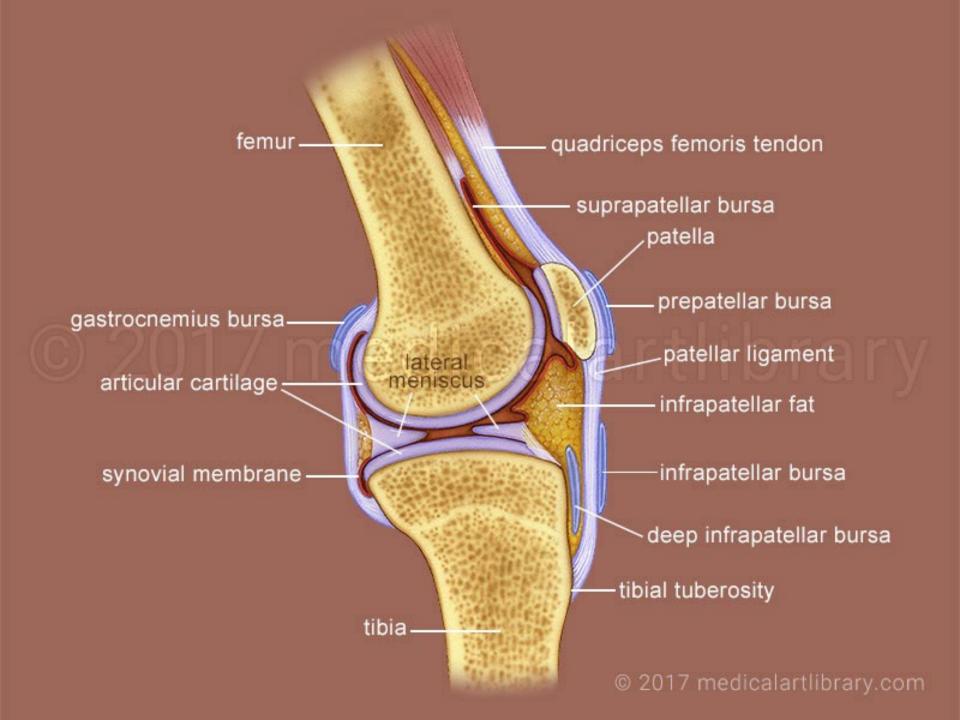
Basic Bone structure

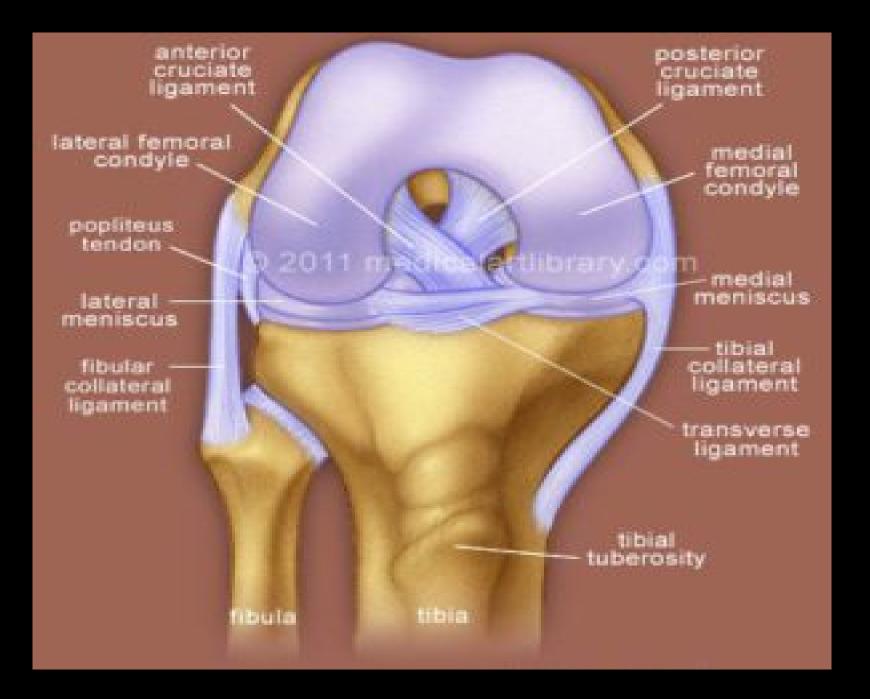


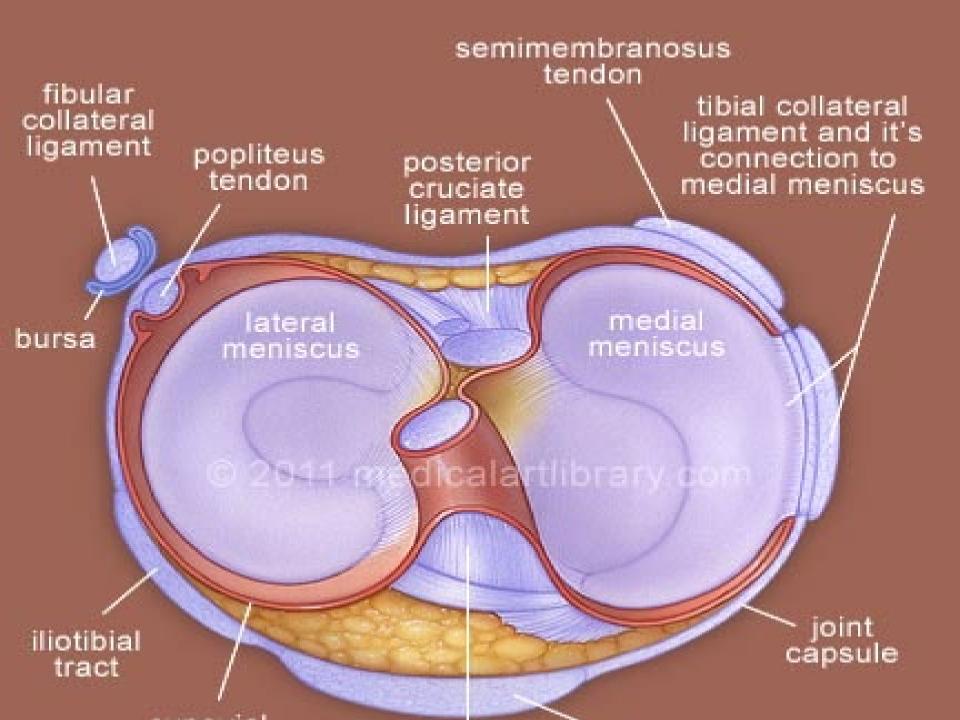
Basic anatomy

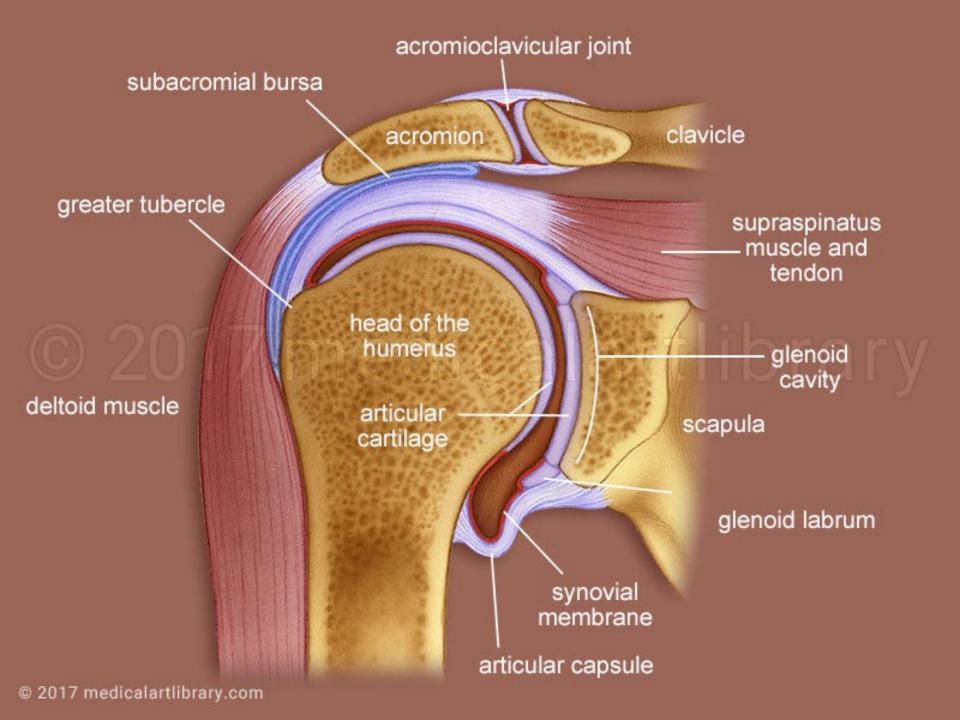


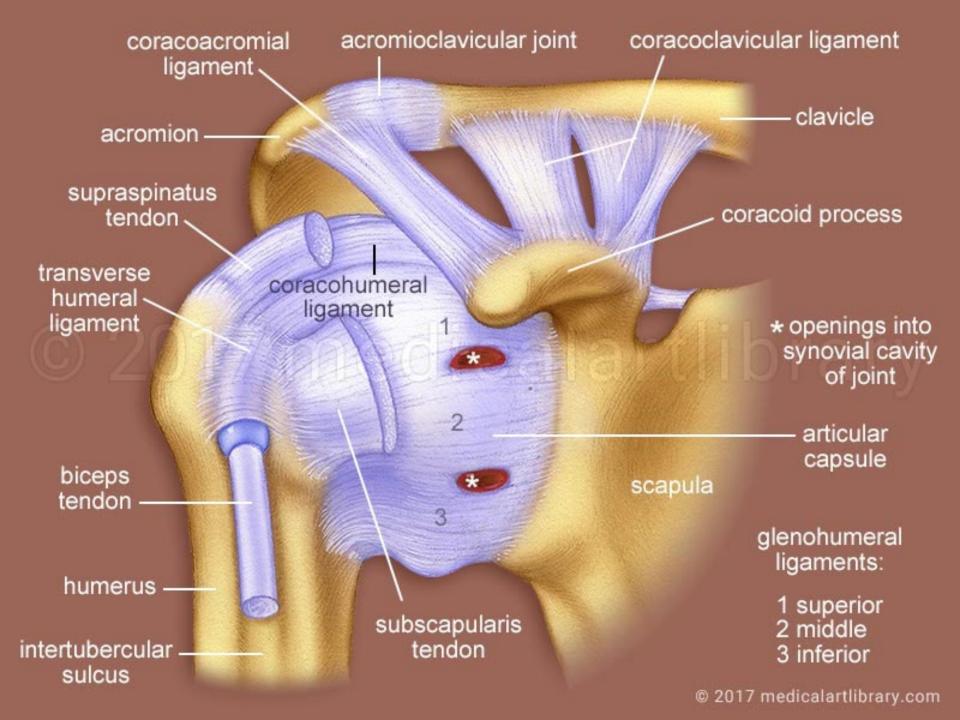








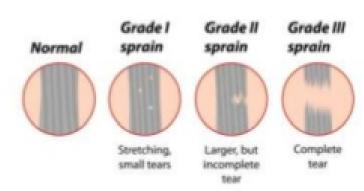




Sprains

- Stretching, partial or complete tearing of ligaments
- Typically occur when joint overextended
- Ankles, knees, wrists, fingers
- Swelling, pain, bruising
- Inability to use joint





Strains

- Tearing of muscle or tendon
- Occurs due to overstretching
- Causes pain, swelling and sometimes inability to use muscle
- Can be prevented by avoiding overexertion, good body mechanics, sports safety



Fracture

Any break in bone (complete or incomplete)

Dislocation

- Complete dissociation of a bone from it's normal position in a joint
- Associated with fracture and soft tissue injury

Subluxation

- Partial or incomplete dislocation
- Typically soft tissue injury

Description

- Described and classified according to:
 - –Type
 - Anatomic location
 - Communication or non communication with external environment

- Open (Compound)
- Closed (Simple)
- Complete
- Incomplete
- Displaced
- Non-displaced
- Greenstick
- Comminuted
- Segmental

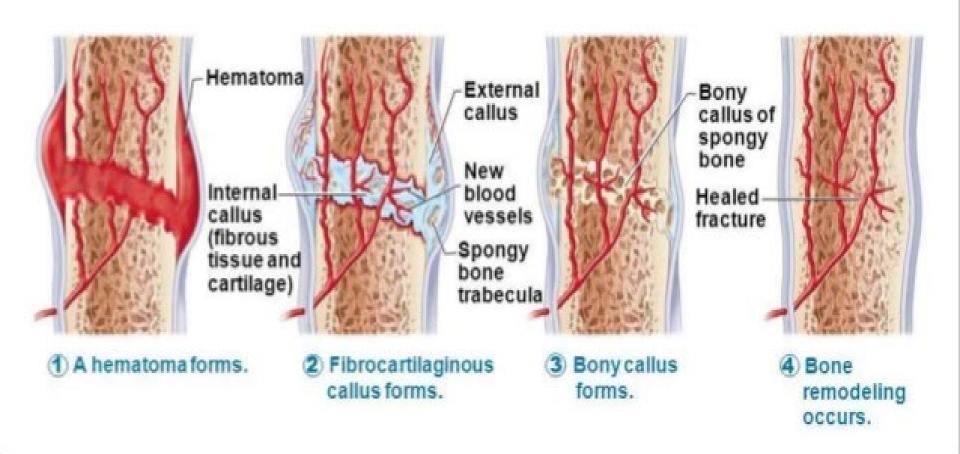
- Butterfly
- Spiral
- Oblique
- Transverse
- Hairline
- Occult
- Epiphyseal
- Fatigue (Stress Fracture)
- Impacted

47 yo M, 4-Wheeler Rollover





Fracture Healing







What can YOU do tomorrow to prevent falls, reduce harm from falls and enable recovery following a fall?

Care for Musculoskeletal Injuries

Proper care vs identifying the type of injury

 Assume any injury to an extremity includes a bone fracture.

 The general care for injuries to muscle, bone and joints includes following R.I.C.E.



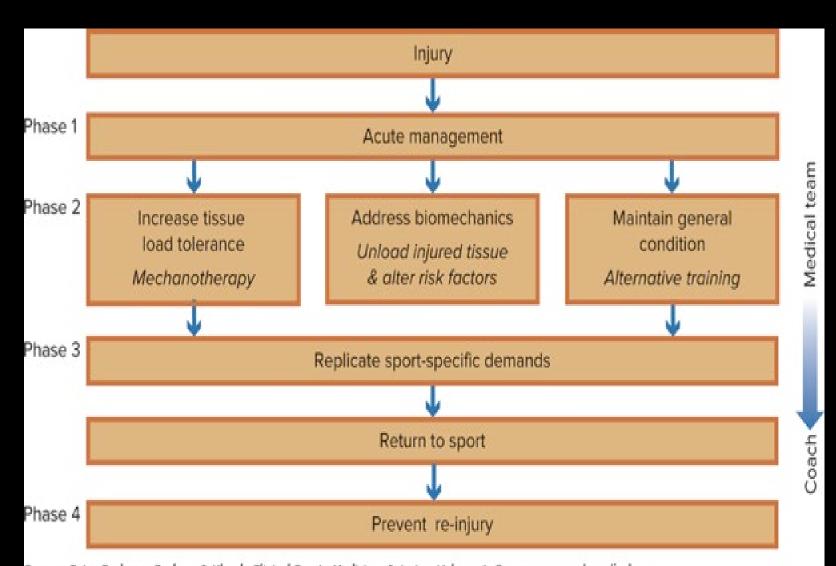
- · Ice
- Compression
- Elevation



- Protection
- Rest
- Ice
- Compression
- Elevation



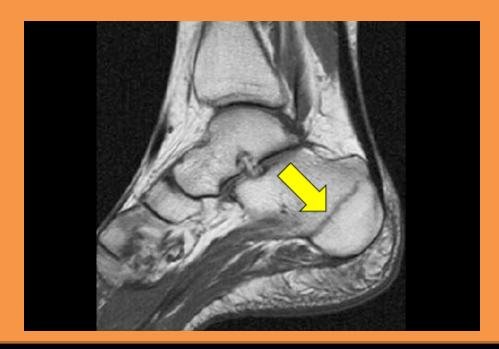
- · Protection
- Optimal loading
- lce
- Compression
- Elevation



Source: Peter Brukner: Brukner & Khan's Clinical Sports Medicine: Injuries, Volume 1, 5e: www.csm.mhmedical.com Copyright © McGraw-Hill Education. All rights reserved.

Injury Diagnosis

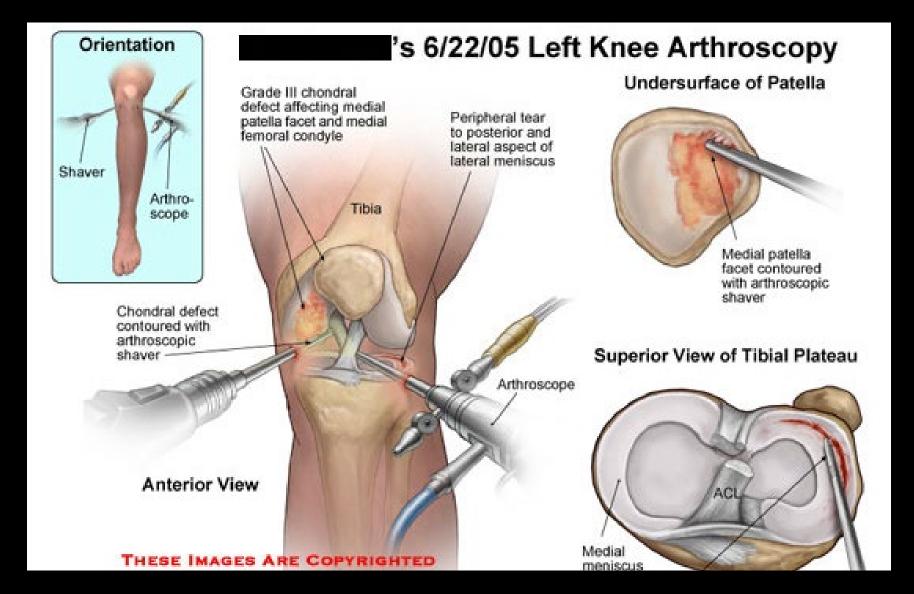
- History
- Examination
- X-rays, MRI, CT Scan, Ultraspound, bone scan
- Labs
- 2nd opinion (if needed)



Acute treatment

- Conservative management: RICE, Antiinflammatory meds, modalities, narcotic meds, injections, physical therapy, rehabilitation
- Minimize the extent of initial damage; reduce associated pain and inflammation; promote healing, maintain and restore strength, flexibility, proprioception, and fitness; functionally rehabilitate for Return to play; assess and correct predisposing factors
- Surgical management: fracture fixation, tendon or ligament repair or reconstruction, arthroscopy

Arthroscopy



Arthroscopy





GAME OVER



