

SPORTS INJURY PREVENTION

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OVERVIEW

- Terminology
- Ankle Sprains
- Sever's Disease
- Osgood Schlatter's Disease
- Patellofemoral pain
- Functional testing
- Prevention training

TERMINOLOGY

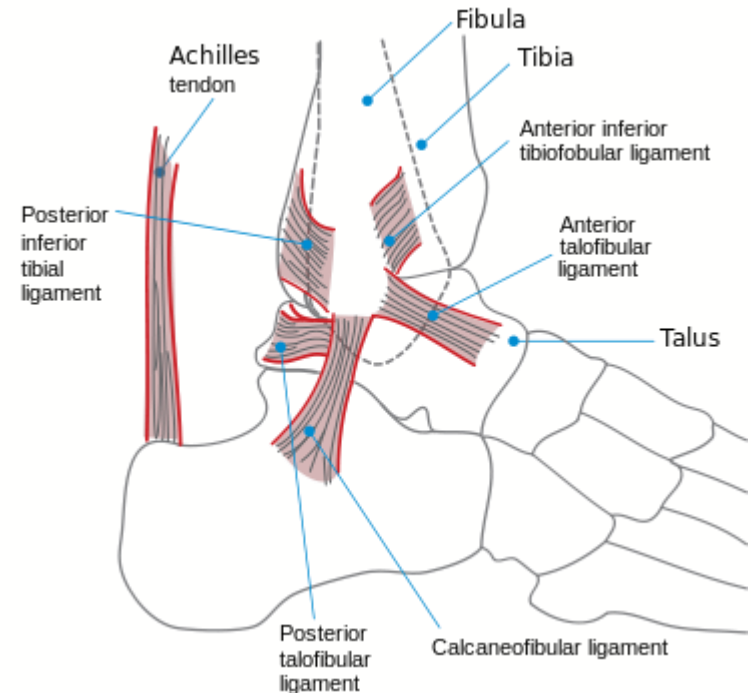
- Sprain
 - Stretched/torn **Ligament**
- Ligament
 - Holds 2 bones together
- Strain
 - Stretched **Muscle or Tendon**
- Tendon
 - Holds muscle to bone
- Growth Plates
 - 2 kinds

TERMINOLOGY

- Acute injury
 - Something happened
- Overuse injury
 - Just hurts
 - Too much damage
 - Not enough recovery
 - Poor biomechanics
- Fatigue is a risk factor for both
- Any injury is a risk factor for other injuries

ANKLE SPRAIN

- Inversion most common
- Ligament or Growth Plate Fracture?
- Difficulty walking at first
- Functional recovery
 - 1-6 weeks
 - Able to run, cut, pivot pain free
 - Rehab for future prevention



ANKLE SPRAIN

- Bracing during recovery
- Rehab exercises to prevent reinjury
 - Exercise bands
 - Stretching
 - **Balance training**



SEVER'S DISEASE

- Overuse injury
- Growth plate irritation
- Risk factors
 - Tight Achilles
 - Rapid growth
 - Older Elementary and Middle school



SEVER'S DISEASE



SEVER'S DISEASE

- Relative rest
- Ice after activities
 - Ice cup massage
- Stretching twice per day
- Heel cups



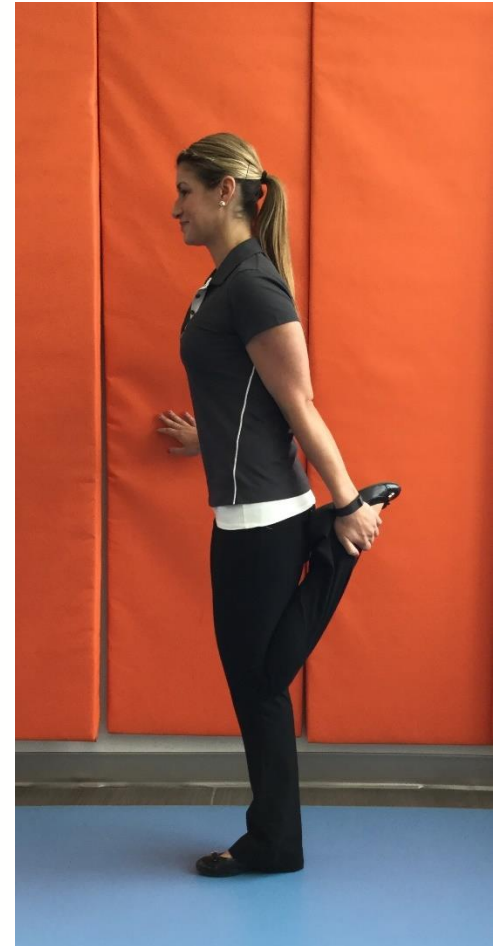
OSGOOD SCHLATTER'S DISEASE

- Overuse injury
- Growth plate irritation
- Risk factors
 - Tight quads/hamstrings
 - Rapid growth
 - Middle school->Early HS



OSGOOD SCHLATTER'S DISEASE

- Relative rest
- Ice after activities
- Stretching twice per day
 - Hamstrings, quads
- Patella strap



PATELLOFEMORAL PAIN

- Overuse injury
- “Runner’s Knee”
- Patella tracking

- Biomechanics
 - Poor hip activation
 - Overuse of quads
 - Tight musculature



PATELLOFEMORAL PAIN

- Relative rest
- Stretching twice per day
- Strengthening daily
 - Hips
 - Core
- Knee sleeve



RELATIVE REST?

Dr. Vernau's Rules

1. No limping on the field
 2. No limping for more than 1 hour after sports
 3. Back to baseline by the morning
- If failing rules, reduce activity
 - Sometimes relative rest is complete rest

RETURN TO SPORT PROGRESSION

- Able to walk pain free
- Able to jog pain free
- Able to sprint pain free
- Able to cut, pivot, jump pain free

- Return to practice
- Progress based on performance

FUNCTIONAL TESTING

- “Can you go?”
- Resistance testing
- Single leg squat
- Single leg hop
- Sideline running
- Cuts/pivots



PREVENTION PROGRAM

Ready. Set. Prevent.

*Injury Prevention & Performance
Enhancement Program*

Please use this guide in combination with our video at www.chop.edu/sportsmed, which shows an athlete performing all the exercises in this program.

Weeks 1-4

Warm-up
Dynamic Stretching
Strengthening Phase 1
Plyometrics Phase 1

After Week 4

Warm-up
Dynamic Stretching
Strengthening Phase 2
Plyometrics Phase 2

- <https://www.chop.edu/video/ready-set-prevent-video>
- FIFA 11+ Injury Prevention Program

THANK YOU!

CHOP.edu/sportsmed

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