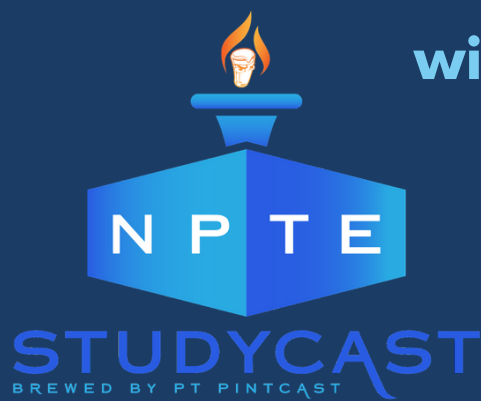


OSGOOD SCHLATTER DISEASE



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WHAT IS IT?

- Osgood Schlatter Disease is an overuse injury with repetitive strain on the tibial tuberosity via the patellar tendon.
- Most commonly seen in adolescent athletes with high quad demand sports (running, jumping).
- Characterized by gradual onset of anterior knee pain at the distal insertion of the patellar tendon.
- Tibial tuberosity does not fully ossify until ages 14-18.
- Patellar tendon is pulling on a boney attachment that is not fully developed therefore leads to a prominence of the tibial tuberosity.
- "Second knee cap"



SPECIAL TESTS



- Subjective: anterior knee pain with running, jumping, increased activity
- Palpation: tender over tibial tuberosity
- Observation: increased tibial tuberosity prominence
- ROM: may be limited by pain, muscle tightness
- Resisted testing: symptoms reproduction with knee extension = challenge quads
- No special tests or imaging

DIFFERENTIAL DIAGNOSIS

- Fracture: trauma, unable to weight bear
- Osteomyelitis: trauma, recent surgery, systemic symptoms (fever)
- Sindig Larsen Johansson Disease:
 - Common in adolescents
 - Caused by pull of patellar tendon at inferior pole of patella
- Patellofemoral Pain Syndrome: pain not localized to tibial tuberosity
 - Pain stepping down, running, jumping



TREATMENT EXAMPLES

- Activity modification
- Decrease quad loading/abnormal patellar tendon stress
- Hip strengthening
- Coordination training

EXAMPLE QUESTION

A 13 year old dancer presents to the clinic for a physical therapy evaluation with a 3 month history of bilateral anterior knee pain. She reports her symptoms increase when she takes ballet class and does a lot of jumping. Upon examination of jumping technique, the physical therapist notices excessive hip internal rotation and adduction upon landing. What further testing would be most appropriate?

- A. Resisted knee flexion
- B. Resisted knee extension
- C. Resisted hip internal rotation
- D. Resisted hip external rotation



Answer: D