

OSD

- Overuse injury
- Traction apophysitis of tibial tuberosity
- Usually in skeletal immature people (especially activities during rapid skeletal development)
- Inflammation + bony microtrauma

Demographics

- Athletes - soccer, gymnastics, basketball, running, track
- Ages 10-15
- Equal between boys and girls
- Genetics
- Hx of apophysitis in another area

Presentation

- Non-traumatic hx of progressively increasing pain over tibial tuberosity
- Aggravated by exercise
- If they hear a pop + immediate onset of acute pain and ecchymosis - consider avulsion f#
- Swollen and inflamed tibial tuberosity
- RROM knee extension and PROM knee flexion painful
- Assess inflexibility/weakness in hamstrings, quads, calves
- Assess patella alta, patella tracking disorders, tibial torsion, foot pronation and pes planus

Imaging

- Not usually required unless avulsion f#/bony pathology is suspected
- Normal fragmentation of tibial apophysis should not be confused with f#/pathology

Management

- Assess severity of the condition
- Cross training - rest quads (swimming, weight lifting, stationary cycling and upper body exercises)
- Electrotherapy + ice
- SMT of spine, SI and LL
- Myofascial release of quads, hamstring, ITB, hip adductors, gastrosoleus
- Fix tracking disorders
- Stretching of hamstring, gastrosoleus, ITB, hip adductors
- Assess and correct LL weakness - hamstrings, hip rotators, calves, quads
- NSAIDs
- Arch supports
- Jogging then sprinting, cutting, squatting then jumping
- Rehab to decrease forces through tibial tuberosity (wider running base)