Demographics

- Uncommon in young populations
- Usually symptomatic (1/3 in >65 years of age)
- Obesity (low grade inflammation in the joint)
- Women more than men

Causes

- Obesity
- Trauma/prior surgery in the knee (within 5-15 years)
- Occupations/activities that exposes the knee to repetitive squatting, kneeling, pivoting, stair climbing
- Athletes in tennis, racquetball, soccer, weightlifting, dance, cycling, gymnastics, football
- Biomechanical deficits - Varus, Valgus, glut med weakness, pes planus

Presentation

- Mainly affects medial tibiofemoral compartment then patellofemoral and lateral compartments
- Older adult with gradual joint pain
- Provoked by activity , relieved by rest
- Described as a deep ache
- Morning stiffness that improves after >30 mins
- Pain worse with weather changes (barometric pressure - cool/damp weather)
- Difficulty with squatting, bending, stair climbing, prolonged walking - can acquire a limp
- Loss of ROM (can have severe limitation)
- Crepitus
- SHort Stride length
- Slower walking speed
- Poor balance
- May have fear avoidance behaviours
- Joint line pain and tenderness (medial compartment)
- +ve Valgus/Varus stress test (instablity)
- Weak Quads
- Assess Get up and go test
- Assess hyperpronation of the foot and weakness of hip abductors and ext rots
- Iliopsoas and hip flexor tightness (prevents hip from working through a full ROM - increases stress to the knee)
- Gastrocsoleus, thigh adductors, piriformis - assess for tightness
- Assess for posterior hip capsule tightness (inhibits normal knee mechanics - creates excessive anterior shear)
- Assess Lx and SIJ

- Assessed by WOMAC pain/functional assessment

ACR Criteria

At least 3 of the 6 findings:

- Age >50 yo
- Morning stiffness for >30 mins
- Bony tenderness
- Bony enlargement
- Crepitus
- No palpable warmth

Sponsored by **Readable.com**
Measure your website readability!
https://readable.com

Imaging

- Not usually required (patients can be asymptomatic with x-ray findings)
- If diagnosis is uncertain , x-rays can be taken
- MRI if considering meniscal tear, ligament sprain/tear, AVN

DDx

- Meniscus injury
- Ligament sprain
- Bursitis
- Tendonitis (ITB/pes anserine tendons)
- AVN
- F#
- Infection
- Neoplasm
- RA
- Gout
- Pseudogout
- Psoriatic arthritis
- Lyme disease

Management

- Home exercises 2-3 times a week
- Knee extensor/quads strengthening (Quad setting, dynamic ball wall squats, chair squats with band
- Glut med strengthening - clam/posterior lunges
- Hip hinges
- Stretching of gastrosoleus, hamstring, ITB, Quads and thigh adductors
- Yoga/taichi
- Overweight patients - low impact aerobic exercise (biking, walking, ellipitical exercise, water walking, swimming)
- Axial manipulation + patella glide (severe cases/pts with assistive device >25% of the day should not be manipulated)
- Stretching of posterior hip capsule
- Ice massage/ice
- Myofascial release of tight musculature
- Total knee replacement if unresponsive to conservative care

Sponsored by **Readable.com**
Measure your website readability!
https://readable.com