Osteoarthritis

HISTORY - (Chronicity, mechanism, symptoms, exacerbating movements, therapies tried, and response)

65-year-old man presenting with **6 months of worsening chronic left knee pain**, **stiff for 15 min in the morning (+LR 3 for OA if stiffness <30 min)** and the pain is exacerbated by increased activity. He is no longer able to go bowling. **DENIES** inciting event, swelling, redness, catching or locking of the knee. He takes Tylenol and ibuprofen with partial relief but has **NOT tried physical therapy**.

POSITIVE EXAM FINDINGS

+ Bony enlargement (+LR 12!), + Crepitus with passive ROM (+LR 2) and **+ Varus deformity (+LR 3.4)**

RELEVANT NEGATIVE EXAM FINDINGS

- McMurray's, - Lachman's, - pain or laxity with valgus and varus maneuvers

ASK FOR A DIAGNOSIS

NEXT STEP IN MANAGEMENT

□ Referral to ortho for consideration of surgery

☑ **X-ray (though poor correlation between imaging severity and symptoms)**

□ MRI

☑ **Referral to physical therapy**

☑ **Diclofenac topical cream BID** (preferred as first step), or Ibuprofen 600mg PO TID or Naproxen 500mg PO BID

☑ **Weight management intervention,** if appropriate

□ Knee injection of corticosteroid

➔ NOW RETURNING AFTER TRYING THE ABOVE WITHOUT ADEQUATE RELIEF. WHAT ARE HIS OPTIONS?

☑ Referral to ortho for consideration of surgery

□ MRI

☑ **Knee injection of corticosteroid** may provide **small-to-moderate short-term** benefit, though less effective than PT.

➔ NOW RETURNING 4 MONTHS LATER AFTER WITH SAME PAIN. ONLY ONE 1MONTH OF RELIEF WITH LAST STEROID INJECTION. WHAT ARE NEXT STEPS?

☑ **Referral to ortho for consideration of total knee replacement**.

□ MRI

□ Knee injection of steroid

Pes Anserinus Pain Syndrome

HISTORY - (Chronicity, mechanism, symptoms, exacerbating movements, therapies tried, and response)

65-year-old-man with CKD 3a presenting with one month of persistent right anterior knee pain that is worst when going upstairs. The pain developed while training for a 5K, which he has not done for a long time. Denies any inciting trauma or twisting and denies any catching or instability of the knee. He takes acetaminophen without much relief.

POSITIVE EXAM FINDINGS

(+) TTP of medial aspect of right knee at level of tibial tuberosity and medial tibia

RELEVANT NEGATIVE EXAM FINDINGS

(-) Lachman's and McMurray's, no pain or laxity with valgus and varus maneuvers.

ASK FOR A DIAGNOSIS

NEXT STEP IN MANAGEMENT

□ Referral to ortho for consideration of surgery

□ X-ray

□ MRI

☑ **Referral to physical therapy**

☑ **Diclofenac topical cream**

☑ **Injection of steroid** at site of maximal tenderness (if severe pain)

Medial Meniscus Injury

HISTORY - (Chronicity, mechanism, symptoms, exacerbating movements, therapies tried, and response)

65 year-old-man presenting with three months of persistent left medial knee pain, worse with walking or when attempting to squat down. He denies any inciting trauma but does have **occasional instability and catching sensation**. He gets partial relief from acetaminophen and ibuprofen. He has not tried physical therapy.

POSITIVE EXAM FINDINGS

+ Pain with palpation of the **medial joint line (+LR 2), + McMurray's (+LR 4), inability to fully extend (+LR 3.2)**

RELEVANT NEGATIVE EXAM FINDINGS

- Lachman's, NO joint laxity with valgus and varus but + pain with varus maneuvers

ASK FOR A DIAGNOSIS

NEXT STEP IN MANAGEMENT

□ Referral to ortho for consideration of surgery

☑ **X-ray** – shows medial compartment OA without bony fragments.

□ MRI

☑ **Referral to physical therapy**

☑ **Diclofenac topical cream BID** (preferred as first step), Ibuprofen 600mg PO TID or Naproxen 500mg PO BID

□ Knee injection of steroid

➔ What if the 65-year-old returned 6 months later after your recommended therapies and now reports ongoing pain, and sometimes feels instability or "catching" of his knee while walking? What are next steps?

□ MRI – could consider but unlikely to change management given concurrent OA.

□ Referral to ortho for consideration of surgery after MRI

☑ **Referral to prosthetics for flexible knee brace fitting to reduce sense of instability.**

☑ **Knee injection of corticosteroid** – may help with pain, less likely to help with primary mechanical meniscus symptoms.

➔ What if this patient was instead 30 years old and reported the symptoms of catching and swelling developed after twisting his knee 3 weeks ago? His XR showed no OA. What would be your initial steps in management?

☑ **MRI - > IF ACUTE LARGE SYMPTOMATIC MENISCAL TEAR REFER TO ORTHO FOR REPAIR**

☑ **Referral to physical therapy**

☑ **Ibuprofen 600mg PO TID or Naproxen 500mg PO BID**

□ Knee injection of steroid

Patellofemoral Pain

HISTORY - (Chronicity, mechanism, symptoms, exacerbating movements, therapies tried, and response)

40 year-old woman with obesity reports 1 month of anterior knee pain. No preceding trauma, but has been increasing her running mileage to help with weight loss. Pain is worse with squatting, going up or down stairs, or sitting for a long time with the knee bent.

POSITIVE EXAM FINDINGS

Diagnosis is primarily based on history. May have tenderness along undersurface of patella. 80% will have pain with squatting.

RELEVANT NEGATIVE EXAM FINDINGS

Normal knee range of motion, no effusion

ASK FOR A DIAGNOSIS

NEXT STEP IN MANAGEMENT

□ Referral to ortho for consideration of surgery
□ X-ray
□ MRI
☑ **Referral to physical therapy**
☑ **Ibuprofen 600mg PO TID or Naproxen 500mg PO BID**
☑ **Rest/activity modification**
□ Knee injection of steroid