

CASE PRESENTATION

JOINT PAIN



KNEE PAIN: HISTORY

- Madam MO is a 65 year- old Malay lady.
 - She has DM, hypertension & dyslipidemia for more than 10 years.
 - She came in to an outpatient department on 3rd April 2016 with a chief complaint of left knee pain.
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- **What further history you need to obtain?**



KNEE PAIN: HISTORY

- Complaint of knee pain for 2-3 weeks. There was no other prior history of knee pains.
- Increasing in pain intensity for 5 days. Rated pain score 8/10.
- Pain was localised on the anterior aspect of the knee joint.
- No history of trauma or sprain.
- Walking and climbing the stairs aggravated the pain.
- The pain was relieved by resting.
- The knee pain had affected her daily living activities. She complained of walking with a limp.



KNEE PAIN:HISTORY

- No other joint pains were reported.
- There was no reported locking, popping or giving way of the knee.
- She noted that the left knee was mildly swollen in comparison to her right knee but could not recall when it started.
- Morning stiffness of both knees was reported. Duration of stiffness was less than 15 minutes and disappeared when she began activities.
- There was no fever, loss of weight or appetite.



KNEE PAIN: HISTORY

- Madam MO has no history of knee injury or surgery.
- She has no history of gout, rheumatoid arthritis or degenerative joint disease.
- She also has no family history of gout.
- She stays with her daughter.
- Medicines: Amlodipine 5mg OD, Atenolol 50mg OD, Simvastatin 20mg ON, Losartan 100mg OD, Metformin 500mg BD.
- Drugs allergy : NIL

- **How do you proceed?**



PHYSICAL EXAMINATION:

- General appearance: comfortable, BMI: 24.6, Gait: stable.
- Clinically pink, well-nourished lady.
- BP: 140/90mmHg, PR: 78 bpm
- Lungs/ CVS/ PA: unremarkable.



KNEE EXAMINATION

- Inspection: no erythema, bruising or discolouration of the left knee. There is also no point of tenderness. Slight bulging is seen on the medial aspect of the left knee joint. Popliteal bulging is seen at left knee posterior aspect.
- Musculature of both knees seems symmetric bilaterally.
- There is no bone deformity.
- On palpation, the left knee joint is not warm or tender. There is mild effusion felt. Range of movement of the left knee is reduced. Crepitus on both legs were felt. Pedal pulses were all intact .



What is your diagnosis?



- Probable diagnosis
 1. Osteoarthritis of knees – acute exacerbation of left knee
- Differential diagnosis:
 1. Baker's cysts
 2. Patellofemoral knee pain (periarticular)
 3. Degenerative Meniscus (intra-articular)
 4. Rheumatoid arthritis / inflammatory arthritis



How do you manage this patient?



Investigations

Plain radiographs:

- Single view of the affected joint may be able to establish diagnosis and severity and also monitor disease progression.
- **Weight bearing films of the knee are required (AP view, standing).**

Classical plain x-ray findings are:

- Osteophytes, joint space narrowing, subchondral bone sclerosis, subchondral cysts and malalignment.

Blood investigations

- When the diagnosis of OA is certain, blood tests are not necessary.
- If inflammatory markers (ESR, CRP) are checked, they are likely to be normal, or only mildly elevated.





KNEE ARTHRITIS: TREATMENT OPTIONS

Non surgical treatment:

- Patients educations & weight reduction
- Anti- inflammatory medicines
- Supplements
- Braces
- Corticosteroids shots / therapeutics injections
- Viscosupplementation shots
- Weight loss
- Cane, crutches, walker
- Physiotherapy

Surgical treatment:

- Unicompartmental knee replacement
- Total knee replacement



KNEE ARTHRITIS

Red flags in knee pain:

- Systemic Complaints – fever, weight loss, pain at rest, night pain

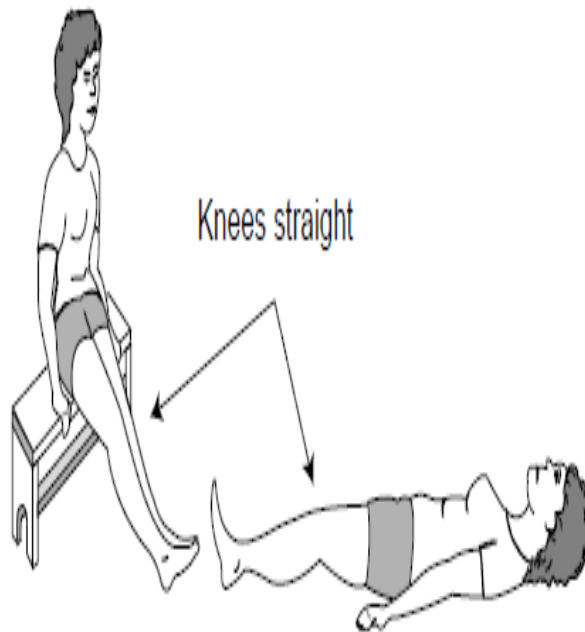
When to refer

- Inability to bear weight
- Extreme of age
- Locking
- Bilateral knee pain
- Other joint involvement – e.g: Hip

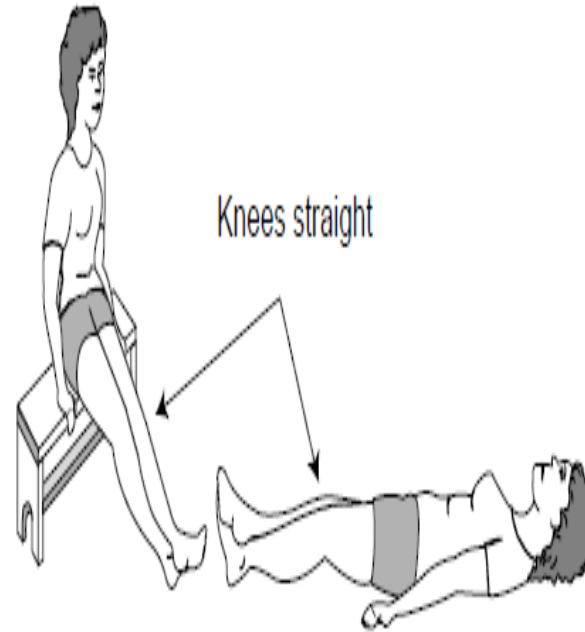


KNEE EXERCISES

Quadriceps-strengthening Exercise



Quadriceps-strengthening exercise concentrating on the vastus medialis oblique muscle



Thank you

