GPSA
GENERAL PRACTICE SUPERVISION AUSTRALIA

Knee pain

Presenting at a rate of 1.4 per 100 encounters, knee pain the second most common musculoskeletal reason for presentation to general practice after back pain, and the joint most affected by sports injuries. Presentations of knee pain are practically divided into post-trauma or not. GP registrars are likely to be familiar with the emergency management of knee injuries, but less familiar with the management of more chronic problems. GP registrars need to be competent in the assessment of knee pain, including focussed history taking and clinical examination, appropriate investigations, and practical management. See related teaching plans on Gout, Bursitis and Acute Monoarthritis.

TEACHING AND LEARNING AREAS		• Anatomy of the knee • Common presentations of knee pain in general practice – bursitis, sports injuries, PFPS, osteoarthritis, inflammatory arthritis, gout etc. • Red flags symptoms and signs of serious causes of knee pain • Approach to clinical examination of the knee, including the Ottawa Knee Rules • Rational investigation of knee pain and the MBS requirements for MRI knee • Practical management of common knee problems - sports injuries, meniscal tears, patellofemoral pain syndrome, osteoarthritis, gout • Indication for, and pathways to, specialist referral • Knee pain in children and adolescents
PRE- SESSION ACTIVITIES		• Murtagh General Practice chapter on 'The painful knee'
TEACHING TIPS AND TRAPS		• A detailed history of the mechanism and nature of injury is critical in sports injuries of the knee • Read 2018 AAFP article Knee pain in adolescents and adults: the initial evaluation • An effusion developing within the first hour of a knee injury indicates a haemarthrosis – suspect an ACL injury or fracture • Knee pain may be referred from the hip or LS spine and lead to missed diagnosis e.g. SCFE, degenerative disc disease • Consider spontaneous osteonecrosis of the knee (SONK) in older patients with acute unilateral knee pain and swelling • Examination can be difficult in the acute setting and may need to be repeated three or more days after a knee injury • The Thessaly test is the most sensitive and specific for diagnosis of meniscal injury • Accumulating evidence suggests that MRI is often unwarranted in the management of patients who present with acute knee pain • Pain with squatting is the most sensitive physical examination finding for PFPS. • Fractures of the knee are often subtle on x-ray - when ordering imaging, provide details on the mechanism of injury and site of maximal tenderness • Quadriceps wasting occurs within days of a knee injury - physiotherapy is therefore an essential aspect of management
RESOURCES	**Read**	• 2020 Australian Family Physician article Imaging of the knee: common acute presentations to general practice
	Watch	• NPS Medicinewise Physical examination of acute ankle and knee injuries
FOLLOW UP/ EXTENSION ACTIVITIES		• Undertake the clinical reasoning challenge and discuss with supervisor

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Clinical Reasoning Challenge

Fatima Ayad, a 42-year lawyer, presents to you with a 6-week history of bilateral anterior knee pain. She has been in training for a 10km fun run over the past few months. She denies any past injuries or knee problems and has no significant PMH. She is otherwise well with no other symptoms and no other joints affected. She has been taking diclofenac with some benefit.

QUESTION 1. What is the MOST LIKELY diagnosis? List one single diagnosis.

QUESTION 2. What are the MOST IMPORTANT features on history that would support the diagnosis? List as many as appropriate.

QUESTION 3. What investigations would you arrange at this point? List as many as appropriate.

QUESTION 4. What are the MOST IMPORTANT broad options for management of Fatima's knee pain? List up to three management options.

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ANSWERS

QUESTION 1

What is the MOST LIKELY diagnosis? List one single diagnosis.

- Patellofemoral pain syndrome

QUESTION 2

What are the MOST IMPORTANT features on history that would support the diagnosis? List as many as appropriate.

- Pain localized behind patella
- Exacerbation with loading the localised flexed knee e.g. running, squatting, going down stairs
- 'Movie-goers' sign – pain with prolonged sitting with knee in flexion

QUESTION 3

What investigations would you arrange at this point? List as many as appropriate.

- Nil required

QUESTION 4

What are the MOST IMPORTANT broad options for management of Fatima's knee pain? List up to three management options.

- Limit exacerbating activities i.e. reduce running
- Short course NSAIDs
- Physiotherapy referral for quadriceps strengthening +/- taping

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