






Osteoarthritis

Osteoarthritis (OA) is the most common form of chronic arthritis in the Australian population, with approximately 10% of people complaining of symptomatic OA. Osteoarthritis is a heterogeneous disease with variable degrees of cartilage loss, osteophyte formation, muscle weakness, meniscal damage, synovial inflammation, ligamentous laxity and subchondral bone changes. Treatment is aimed at symptom management, preservation of joint function, and improving quality of life. As a common chronic disease leading to significant morbidity, GP registrars need to develop a patient-centred and evidence-based approach to managing OA.

TEACHING AND LEARNING AREAS 	<ul style="list-style-type: none"> • Joint examination techniques (a common part of the Fellowship exams) • Differential diagnosis of OA, and red flags for serious other conditions • Role of imaging, particularly in excluding other causes of joint pain • Indications for referral, and referral pathways • Approach to management – multidisciplinary and comprehensive, including non-pharmacological, medication and surgical options 				
PRE-SESSION ACTIVITIES 	<ul style="list-style-type: none"> • Ask the GP registrar to undertake the Clinical Reasoning Challenge under exam conditions (7 minutes) and bring along to discuss 				
TEACHING TIPS AND TRAPS 	<ul style="list-style-type: none"> • There is only a modest correlation between x-ray changes and symptoms of OA – therefore, in general, radiology should only be ordered if the diagnosis is uncertain • Obesity is the most important modifiable risk factor, and weight loss is critical in management • Paracetamol is no longer recommended as first line therapy by many OA guidelines • The benefits of long term opiates are limited, and leads to the risk of opioid dependence • Consider and treat concurrent depression in patients with OA • Arthroscopic surgery for knee OA is of limited benefit • Self-management is an important strategy in OA management 				
RESOURCES 	<table border="1"> <tbody> <tr> <td data-bbox="341 1630 434 1749">Read</td> <td data-bbox="434 1630 1497 1749"> <ul style="list-style-type: none"> • Managing Osteoarthritis - Australian Prescriber article (2015) • Osteoarthritis: Where are we for pain and therapy in 2013? - AFP article (2013) • OARSI guidelines for the non-surgical management of knee osteoarthritis (2014) </td> </tr> <tr> <td data-bbox="341 1749 434 1816">Watch</td> <td data-bbox="434 1749 1497 1816"> <ul style="list-style-type: none"> • McMaster Joint Examination videos on knee and hip </td> </tr> </tbody> </table>	Read	<ul style="list-style-type: none"> • Managing Osteoarthritis - Australian Prescriber article (2015) • Osteoarthritis: Where are we for pain and therapy in 2013? - AFP article (2013) • OARSI guidelines for the non-surgical management of knee osteoarthritis (2014) 	Watch	<ul style="list-style-type: none"> • McMaster Joint Examination videos on knee and hip
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FOLLOW UP/ EXTENSION ACTIVITIES 	<ul style="list-style-type: none"> • GP registrar to undertake a mini-audit of the management of 5 patients with knee OA • Practice to arrange a physiotherapist to speak about the management of OA 				

Osteoarthritis

Clinical Reasoning Challenge

Harold is a 73 year old retired builder who presents with a 12 month history of worsening bilateral knee pain. The pain is worse after walking and settles with rest. Apart from high BP, he denies any significant PMHx.

QUESTION 1. What other key features should be sought on history? List the most important features.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

QUESTION 2. Further enquiry reveals no significant history. What aspects of a physical examination would you perform? List the most important aspects.

- 1 _____
- 2 _____
- 3 _____
- 4 _____

Examination reveals weight of 112kg, BMI 34.7 and bilateral bony swelling, small effusions and tenderness. You make a diagnosis of osteoarthritis.

QUESTION 3. What tests would you order to investigate these symptoms? List as many tests as appropriate.

- 1 _____

QUESTION 4. What are the most important aspects of management? List as many aspects of management as appropriate.

- | | |
|---------|---------|
| 1 _____ | 5 _____ |
| 2 _____ | 6 _____ |
| 3 _____ | 7 _____ |
| 4 _____ | 8 _____ |

Osteoarthritis

ANSWERS

QUESTION 1

What other key features should be sought on history? List the most important features.

- Other joint involvement
- Symptoms associated with other types of arthritis e.g. psoriasis, gout
- Red flag symptoms e.g. night pain, weight loss
- Effect on quality of life
- Patient concerns

QUESTION 2

Further enquiry reveals no significant history. What aspects of a physical examination would you perform? List the most important aspects.

- Weight and BMI
- BP
- Knee examination
- Extra-articular signs e.g. rash, gouty tophi

Examination reveals weight of 112kg, BMI 34.7 and bilateral bony swelling, small effusions and tenderness. You make a diagnosis of osteoarthritis.

QUESTION 3

What tests would you order to investigate these symptoms? List as many tests as appropriate.

- Nil (Weight bearing knee x-rays may be appropriate but should only be ordered initially to exclude another cause)

QUESTION 4

What are the most important initial aspects of management? List as many aspects of management as appropriate.

Education

Non-pharmacological

- Weight loss
- Strength training
- Exercise – land- and water-based
- Mobility aids

Pharmacological

- Oral
- Topical
- Intra-articular