






# 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. Also see teaching plans on [knee pain](#), [shoulder pain](#), [back pain](#), [neck pain](#) and [foot and ankle problems](#).

<b>TEACHING AND LEARNING AREAS</b> 	<ul style="list-style-type: none"> <li>• Joint examination techniques (common in the Fellowship exams)</li> <li>• Differential diagnosis of OA, and red flags for serious other conditions</li> <li>• Role of imaging, particularly in excluding other causes of joint pain</li> <li>• Indications for referral, and referral pathways</li> <li>• Approach to management – multidisciplinary and comprehensive, including non-pharmacological, medication and surgical options</li> </ul>						
<b>PRE-SESSION ACTIVITIES</b> 	<ul style="list-style-type: none"> <li>• Read the <a href="#">2018 AAFP article Osteoarthritis</a>; rapid evidence review</li> </ul>						
<b>TEACHING TIPS AND TRAPS</b> 	<ul style="list-style-type: none"> <li>• 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</li> <li>• Obesity is the most important modifiable risk factor, and weight loss is critical in management</li> <li>• Paracetamol is no longer recommended as first line therapy by many OA guidelines</li> <li>• The benefits of long term opiates are limited, and leads to the risk of opioid dependence</li> <li>• Consider and treat concurrent depression in patients with OA</li> <li>• Arthroscopic surgery for knee OA is of limited benefit</li> <li>• Self-management is an important strategy in OA management</li> </ul>						
<b>RESOURCES</b> 	<table border="1"> <tbody> <tr> <td data-bbox="330 1664 432 1809"><b>Read</b></td> <td data-bbox="432 1664 1505 1809"> <ul style="list-style-type: none"> <li>• <a href="#">2018 RACGP guideline for the management of knee and hip osteoarthritis</a></li> <li>• <a href="#">RACGP HANDI Exercise for knee osteoarthritis</a></li> <li>• <a href="#">Managing Osteoarthritis</a> - Australian Prescriber article (2015)</li> </ul> </td> </tr> <tr> <td data-bbox="330 1809 432 1877"><b>Watch</b></td> <td data-bbox="432 1809 1505 1877"> <ul style="list-style-type: none"> <li>• McMaster Joint Examination videos on <a href="#">knee</a> and <a href="#">hip</a></li> </ul> </td> </tr> <tr> <td data-bbox="330 1877 432 1924"><b>Listen</b></td> <td data-bbox="432 1877 1505 1924"> <ul style="list-style-type: none"> <li>• <a href="#">MJA Podcasts 2016 Episode 3: Osteoarthritis, obesity and inflammation</a></li> </ul> </td> </tr> </tbody> </table>	<b>Read</b>	<ul style="list-style-type: none"> <li>• <a href="#">2018 RACGP guideline for the management of knee and hip osteoarthritis</a></li> <li>• <a href="#">RACGP HANDI Exercise for knee osteoarthritis</a></li> <li>• <a href="#">Managing Osteoarthritis</a> - Australian Prescriber article (2015)</li> </ul>	<b>Watch</b>	<ul style="list-style-type: none"> <li>• McMaster Joint Examination videos on <a href="#">knee</a> and <a href="#">hip</a></li> </ul>	<b>Listen</b>	<ul style="list-style-type: none"> <li>• <a href="#">MJA Podcasts 2016 Episode 3: Osteoarthritis, obesity and inflammation</a></li> </ul>
<b>Read</b>	<ul style="list-style-type: none"> <li>• <a href="#">2018 RACGP guideline for the management of knee and hip osteoarthritis</a></li> <li>• <a href="#">RACGP HANDI Exercise for knee osteoarthritis</a></li> <li>• <a href="#">Managing Osteoarthritis</a> - Australian Prescriber article (2015)</li> </ul>						
<b>Watch</b>	<ul style="list-style-type: none"> <li>• McMaster Joint Examination videos on <a href="#">knee</a> and <a href="#">hip</a></li> </ul>						
<b>Listen</b>	<ul style="list-style-type: none"> <li>• <a href="#">MJA Podcasts 2016 Episode 3: Osteoarthritis, obesity and inflammation</a></li> </ul>						
<b>FOLLOW UP/ EXTENSION ACTIVITIES</b> 	<ul style="list-style-type: none"> <li>• Registrar to undertake the clinical reasoning challenge and discuss with supervisor</li> <li>• GP registrar to undertake a mini-audit of the management of 5 patients with knee OA</li> <li>• Practice to arrange a physiotherapist to speak about the management of OA</li> </ul>						

# 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 initial 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

See [2018 RACGP guideline for the management of knee and hip osteoarthritis](#)