# CURRENT THINKING ON... ARTHRITIS

Welcome to our CPD module series for community pharmacy technicians. Written in conjunction with the ***Pharmacy Magazine*** CPD series, it will mirror the magazine's programme throughout the year. The series has been designed for you to use as part of your continuing professional development. Reflection exercises have been included to help start you off in the CPD learning cycle.

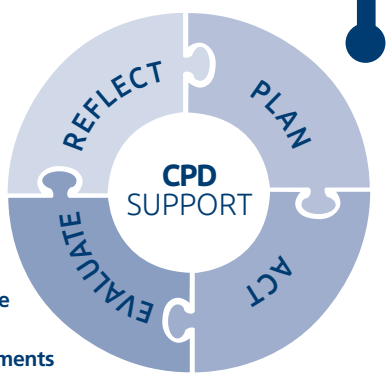
**Contributing author:** Asha Fowells MRPharmS, community pharmacist and pharmacy writer.

## MODULE NUMBER: 56

**AIM:** To understand the symptoms and management of the two most common arthritic conditions: osteoarthritis and rheumatoid arthritis.

**OBJECTIVES:** After reading this module, pharmacy technicians will:

- Appreciate the differences between osteoarthritis and rheumatoid arthritis, and be aware of some of the conditions that can produce similar symptoms
- Know the self-care steps that can help in the management of these conditions
- Have an understanding of some of the main pharmacological treatments of these diseases.




**According to the charity Arthritis Care,** around 10 million people in the UK are living with arthritis. While often thought of as a disease that only affects older people, approximately 27,000 arthritis patients in the UK are under the age of 25 and some are even children.

The term arthritis describes inflammation of the joints. There are around 200 types of the disease, although this module only considers the two most common: osteoarthritis (OA) and rheumatoid arthritis (RA). Neither can be cured, so treatment focuses on symptom management, slowing disease progression and maintaining everyday life for as long as possible.

## Osteoarthritis

Osteoarthritis is the most common form of arthritis, affecting around 8.75 million people in the UK. The main symptoms include pain and stiffness in certain joints of the body – most commonly the knees, hips and hands – as a result of changes to the cartilage, bones and ligaments. Not everybody with OA is affected in the same way and an individual may not experience the same symptoms in different joints.

Osteoarthritis does not have a specific cause. However, several risk factors increase the likelihood of someone developing the condition. These include age (OA is rare in people under 45 years), gender (women are more likely to develop OA than men), obesity (due to the additional pressure put on joints), family history, bone density and previous joint injury.

The first sign of OA is usually a slightly stiff and sore joint, particularly first thing in the morning, during exercise and at the end of the day. The joint may not move as freely as it once did, it may appear swollen, or make a creaking or cracking noise. Some individuals find that after a few weeks or months, symptoms appear to improve. However, seeking medical help is important, as receiving a prompt diagnosis can greatly help to prevent further damage and minimise future problems. At the other end of the symptom spectrum are those who haven't sought help and who are more likely to experience problems such as muscle wasting and weakness, joint deformity, depression, and possibly impaired mobility.

## Rheumatoid arthritis

Rheumatoid arthritis affects around one per cent of the UK population, making it the second most common form of arthritis. It is an inflammatory disease that largely affects joints such as the hands, feet and wrists, which become swollen, red and painful. However, as it is an auto-immune condition, any part of the body can be affected, including the heart, lungs and eyes.

It is not known what triggers RA, but factors commonly include genetics, gender (similar to OA, women are affected more than men), smoking and age (RA usually appears between 40 and 60 years). Rheumatoid arthritis symptoms usually develop gradually over the course of several weeks or months, although some people experience a sudden onset over a few days, with the affected joints becoming stiff (particularly in the morning or after a period of inactivity), painful and swollen. The sufferer may also feel tired and unwell on a more general basis, perhaps suffering from a fever, sweating or appetite loss. As the condition is caused by inflammation, symptoms may also be present elsewhere in the body. These may include dry eyes, nodule formation near affected joints and other issues such as problems with the lungs, nerves, blood vessels or even the heart.

If RA is not managed appropriately, joints may become permanently damaged and the individual may be at an increased risk of other health problems such as osteoporosis, anaemia, infection, cardio-vascular disease, malignancy and mental health conditions, (e.g. depression and anxiety).

The costs associated with RA are high, not just because of the burden placed on the NHS, but also to sufferers, carers, and society as a whole, as around a third of patients stop working within two years of the disease first manifesting.

## Non-pharmacological management

There are many steps that people with OA and RA can take to ease symptoms and prevent the condition from worsening:

- **Education,** advice and access to information about the condition and its management are vital. This should be offered repeatedly, as patients are likely to have different concerns at different times
- **Exercise,** both strengthening and aerobic, builds muscle and strengthens joints, thereby improving mobility and symptoms. A physiotherapist is the best person to advise on what is suitable and beneficial, particularly as patients with arthritic conditions may be anxious that exercising will worsen their symptoms
- **Weight reduction** is one of the most beneficial measures an overweight or obese OA or RA sufferer can take, ideally through exercise and dietary changes
- **Pacing** (interspersing physical chores with gentler tasks and rest periods, if necessary) is an important skill to learn
- **Relaxation techniques** can be valuable for those who are tense and frustrated because of pain or mobility problems
- **Assistive devices** have a role in helping those with specific needs – for example, wearing supportive insoles or footwear can be beneficial to someone with arthritis of the feet or knees.

Pharmacy technicians have a wealth of knowledge on many of the above measures and are ideally placed to highlight those that arthritis sufferers may have overlooked, such as eligibility for winter vaccinations. Community pharmacy teams can also signpost patients to local support groups, and offer a familiar face and a sympathetic ear for patients and carers who may at times feel isolated.

## reflection exercise

**What support is available in your local area for arthritis sufferers and their carers? Make sure you have an up to date list so that you can signpost those who ask or who you feel might benefit.**

## Pharmacological management of osteoarthritis

Pain relief is the main treatment aim of OA. Paracetamol, taken regularly if required, and/or topical non-steroidal anti-inflammatory drugs (NSAIDs) should be used first-line, as well as topical capsaicin for knees or hands that continue to be painful. If these measures prove ineffective, opioids may be considered, or an oral NSAID or COX-2 inhibitor may be added or used as a substitute, although only at the lowest effective dose for the shortest possible time period and with a proton pump inhibitor taken concurrently. For moderate to severe pain, injectable corticosteroids or surgical options may be used.

Treatments that are not recommended on the NHS include rubefacients, glucosamine, chondroitin and acupuncture, although patients may choose to fund one or more of these themselves. Transcutaneous electrical nerve stimulation (TENS) and/or thermotherapy may be beneficial to some patients alongside other treatments.

All patients with symptomatic OA should be reviewed regularly to monitor symptoms, the effectiveness and tolerability of treatments, and any concerns or questions the sufferer has about their condition, as well as to highlight any relevant services they could access. Patients should also be aware that they can seek help at a time earlier than the next allotted appointment if they experience any problems with their condition or treatments, or have any other concerns.

## Pharmacological management of rheumatoid arthritis

The main treatment aim of RA is to reduce joint inflammation and slow down or prevent further damage to enable sufferers to live as full a life as possible. Disease-modifying antirheumatic drugs (DMARDs), usually methotrexate plus at least one other (eg. leflunomide, hydroxychloroquine and sulfasalazine), should be tried as soon as possible after active RA is diagnosed. If DMARDs prove ineffective or have side effects that the patient cannot tolerate, a cytokine modulator such as etanercept or infliximab may be used either in combination with methotrexate or on its own.

It can take weeks or months for DMARD or cytokine modulator therapy to take full effect (although cytokine modulator therapy tends to work a little quicker than DMARD), during which time the patient should be regularly monitored for side effects and efficacy. Short term corticosteroids may also be used to combat inflammation rapidly. Disease-modifying medication should only be continued for as long as the benefits are felt and at the lowest dose possible to prevent flare-ups.

Pain relief – paracetamol, codeine or a compound analgesic, replaced if necessary by an oral NSAID or COX-2 inhibitor at the lowest effective dose for the shortest possible time, plus a PPI – may be used during flare-ups of RA.

Surgery is usually only recommended when a joint has been damaged to such an extent that it is no longer functional or has become deformed, or if pain is not reduced despite trying alternative measures.

Medication is just part of the management plan for a patient with RA, who will require a multidisciplinary team (ideally through one named contact) to enable life to continue as normally as possible. Podiatry is particularly important for RA patients.

There is little or no evidence supporting long-term use of complementary therapies, such as acupuncture or chiropractic, although some patients may find them effective in the short-term. Use of such alternative approaches should not affect or replace conventional treatments.

Patients with RA should have a check-up at least once a year – and considerably more often if they experience a flare-up or require therapeutic drug monitoring. Blood tests and imaging should be repeated to measure disease progression.

Patients should know how and when to access specialist care rapidly if they experience a flare-up and, as with all long-term conditions, they should be given all of the information and time they require to understand their disease and how it is managed. They should also be involved in treatment decisions.

Osteoarthritis is the most common form of arthritis, affecting around 8.75 million people in the UK

## USEFUL WEBSITES:

- NHS Choices: www.nhs.uk/conditions/osteoarthritis and www.nhs.uk/conditions/rheumatoid-arthritis is a good starting point for anyone looking for more information on osteoporosis and rheumatoid arthritis
- Patient groups have a wealth of information on diseases and treatments, and often have advice lines and online forums. Arthritis Research UK: www.arthritisresearchuk.org/arthritis-information/conditions and Arthritis Care: www.arthritiscare.org.uk/AboutArthritis/Conditions/ have a broad offering, with the National Rheumatoid Arthritis Society: www.nras.org.uk being more specialised.

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**Next month:** We focus on eye conditions.