

# Medications for musculoskeletal conditions

- Medications play a key role in helping you manage your musculoskeletal condition
- They work alongside other treatments such as exercise, sleep, aids and equipment and a healthy diet
- The medications your doctor prescribes will depend on your condition and your symptoms

If you live with a musculoskeletal condition (e.g. arthritis, back pain, osteoporosis) it's likely that you use medication to help you manage your condition and symptoms (e.g. pain, inflammation).

Together with other strategies such as exercise, weight management, learning different ways to manage your pain, aids and equipment and getting a good night's sleep, medications can help you live well.

There are many types of medication that you may use to help you at different times and in different ways. Medications can help control symptoms (e.g. pain, swelling and stiffness) and some can slow the progress of your condition.

In most cases, when prescribing medications your doctor will start with the simplest medications at the smallest doses and work their way up to more complex medications and larger doses depending on how your condition responds to treatment.

Depending on your particular symptoms, and how much pain and inflammation you have, you may take one medication or a combination of different medications.

This information resource will look at the types of medications that you may use – regularly and occasionally – depending on your condition and symptoms.



*Note:* It's important to remember that all medications can have side effects (or unwanted effects). Together with your doctor or specialist you should weigh up the risks and benefits of medications for your specific situation.

#### **Topicals**

Some quick and temporary forms of pain relief are rubs, gels, ointments, sprays and creams that are applied directly to your skin (topically). There are a lot of them available, in many different forms and using different ingredients.

When you apply these products you're actually benefiting from two things – the first is the product itself, the second is the mini-massage you enjoy when applying the product.

Topical products work in a variety of ways and use different ingredients.

*Note:* Be careful when using topicals that you read the instructions carefully, wash your hands thoroughly and avoid contact with your eyes and other sensitive areas.

Counterirritants - these products have ingredients such as menthol, methyl salicylate, eucalyptus oil and camphor. They're called counterirritants because they create a burning or cooling sensation that distracts you from your pain. You may know some of these by their distinctive smell, however, you can now get some that have little or no smell.

NSAIDs - many topical products contain non-steroidal anti-inflammatory drugs (NSAIDs). You can rub the NSAID into the skin directly over the joint to relieve pain. They may be an option for you if you can't take oral NSAIDs due to other health issues (e.g. high blood pressure) or the risk of complications (e.g. stomach problems), as less medication is absorbed into the bloodstream.



Capsaicin - is the main ingredient of chili peppers. Applied to the skin as a cream, it works by interfering with the pain signals between your nerve endings and brain. It may provide temporary pain relief.

## **Analgesics (pain killers)**

These medications provide temporary pain relief. They can range in strength from mild to very strong. You can purchase many of these over-the-counter at your pharmacy or supermarket, however stronger medications, including those containing codeine require a prescription from your doctor.

Analgesics are generally used as a short-term measure to help you get through a flare, or a period of time when your pain is particularly bad. They're not meant to be a long-term strategy for pain management.

### Oral non-steroidal anti-inflammatory drugs (NSAIDs)

NSAIDs provide temporary pain relief, specifically pain associated with inflammation. There are over-the-counter NSAIDs that you can buy at the pharmacy or supermarket, as well as prescription NSAIDs.

NSAIDs block the action of specific enzymes (cyclooxygenase or COX) that are involved in inflammation. However COX also protects the lining of your stomach and intestines. That means that when taking NSAIDs you may experience stomach problems – pain, nausea, diarrhoea, ulcers. This risk is increased if you take NSAIDs frequently, if you have a history of stomach ulcers, if you're over 65, and if you take other medications that interact with NSAIDs. Before you start taking NSAIDs discuss it with your doctor or pharmacist to make sure it's safe for you to do so.

## **Opioids**

Opioids are used to treat severe pain associated with cancer or acute pain (e.g. following surgery). They may be helpful for some people with severe, persistent non-cancer pain, however their long-term benefit is controversial. Opioids can have serious side effects (including constipation, breathing difficulties). They will also produce physical dependence over time and have the potential to produce addiction. Long-term use of strong opioids are used cautiously; before prescribing an opioid you and your doctor will discuss the risks and benefits for you.

## **Anti-neuropathic pain medications**

These medications act on the nervous system to reduce neuropathic (nerve) pain associated with injury, disease, dysfunction or where the nervous system itself is 'oversensitised'. These include the older type antidepressants, anti-epilepsy medications, and some blood pressure medications. These medications typically have significant side effects (e.g. reduced concentration,

sleepiness, weight gain), however, sometimes they may be prescribed for these effects (e.g. to improve sleep).

#### **Corticosteroids**

Corticosteroids are used to rapidly control or reduce inflammation. They can be injected or swallowed.

Corticosteroid liquid or tablets – may be used in the early days of your condition, or if you're going through a flare, to help get inflammation and pain under control. They do have side effects if used for long periods, so your doctor will closely monitor you while you're taking them.

Corticosteroid injections - if a joint is particularly painful and swollen, an injection directly into the joint can help to relieve your pain and inflammation.

## Disease modifying anti-rheumatic drugs (DMARDs)

Your immune system is designed to identify foreign bodies (e.g. bacteria, viruses) and attack them to keep you healthy. However with some musculoskeletal conditions, the immune system mistakenly attacks healthy tissue – in and around the joints – causing ongoing inflammation and pain.

DMARDs work by controlling your overactive immune system. They help relieve pain and inflammation, and can also reduce or prevent joint damage. They're a long-term treatment for many types of musculoskeletal conditions.

As their name suggests, they work on modifying the disease process, not just managing your symptoms. It can take several weeks to months before you begin to notice any effect, so you may also need to take other medications to help control pain and inflammation until then.

There are a number of different DMARDs on the market and your doctor will discuss your options with you, as well as the risk and benefits of each. You may find you try a few before you find one that works best for you.

While taking DMARDs you'll have regular blood tests to monitor the effects of the medication on your condition, and to watch for possible side effects before they have the potential to become serious.

# Biologics and biosimilars (bDMARDs)

These newer medications are also a type of disease modifying drug, and they also work to control your immune system. However unlike other disease modifying drugs, biologics and biosimilars target specific cells and proteins that are causing the inflammation and tissue damage, rather than suppressing your entire immune system.



Biologics (or biologicals) have been created from a biological source (e.g. human cells). They're usually made of proteins that occur naturally in our bodies.

The patents on many biologics have expired, so other companies can make a similar, slightly cheaper version - which has led to the appearance of biosimilars. They're very similar to biologics, but not the same as the original medication.

Biologics and biosimilars aren't prescribed to everyone due to the high costs associated with developing them. They also may not be the best choice in terms of side effects and the availability of other effective medications.

## **Osteoporosis medications**

Bones are living tissue and are constantly growing, rebuilding, replacing and repairing. When you're young, you build more bone than you lose to create a strong skeleton. As people get older, they begin to lose more bone than they rebuild.

If this effects overall bone density and strength, bones can break more easily. This is osteoporosis.

If you have osteoporosis, the type of medication chosen by your doctor will depend on factors such as your age, general health, and fracture risk.

Osteoporosis medicines work by:

- slowing down bone loss and slow the progression of osteoporosis- antiresorptives
- increasing the amount of bone that's made anabolic medicines.

Antiresorptives are the most commonly prescribed medication for treating osteoporosis. They include the group of medications called bisphosphonates.

Anabolic medicines are used to treat people with severe osteoporosis.

These medications may be taken as a tablet, an injection under the skin or an infusion into the vein. How often you take them (e.g. daily, weekly, monthly) will depend on the medication.

Hormone replacement therapy (HRT) - may be an option for some women around the time of menopause. It's a synthetic version of the hormones oestrogen and progesterone. Oestrogen plays an important role in maintaining bone strength, however during menopause, oestrogen levels drop significantly and women experience a period of rapid bone loss. HRT is most commonly prescribed as a combination of oestrogen and progestogen, however some women may take oestrogen on its own.

Supplements – calcium and vitamins D are important for bone health. Your doctor may prescribe a supplement if you're not getting enough through diet or exposure to sunlight.

## **Gout medications**

Gout occurs when uric acid, a normal waste product, builds up in your bloodstream and forms urate crystals in a joint. It can happen if your body makes too much uric acid, or your kidneys can't clear enough of it out, and it builds up in your blood. This is called hyperuricaemia.

If you have gout, the first step in treatment is getting the pain and inflammation under control. This may involve anti-inflammatories and/or analgesics), cold packs on the swollen joint, and rest.

Once the painful attack is under control, depending on the underlying cause of your hyperuricaemia, your doctor may prescribe medications that:

- reduce the amount of uric acid your body produces, or
- increase the amount of uric acid you pass through your urine.

#### Fibromyalgia medications

Combined with other strategies, medication may be used to manage your pain, reduce stress and help you sleep.

There are different types of medication that your doctor may recommend depending on your symptoms:

- analgesics for temporary pain relief
- anti-inflammatory or analgesic creams and gels may provide some temporary pain relief
- anti-depressant medications may be used in small doses to reduce pain and help you sleep.
- anti-epileptic medications may also be used in small doses to reduce pain and improve sleep, however they aren't listed on the Pharmaceutical Benefits Scheme (PBS) for fibromyalgia.

# **Medication tips**

- Before buying any over-the-counter medications talk with your doctor or pharmacist about the benefits and harms of these medications and how to use them most effectively.
- Be aware of the active ingredients in all of your medications to prevent accidentally taking too much, e.g. be careful not to use other medications that contain paracetamol (e.g. some cold and flu remedies) while you're taking paracetamol for pain relief. If you're unsure of the active ingredients, talk with your doctor or pharmacist.



- Always take your medications as prescribed, and organise regular review appointments with your doctor.
- If you have difficulty remembering to take your medications, set up a reminder alert on your phone, use a pill dispenser or link your medications to a daily routine (e.g. cleaning your teeth).
- All medications have side effects. Discuss these with your doctor or pharmacist and read the consumer medicine information that comes with any new medication.
- Let your doctor know about any other medications or supplements you're taking. This includes over-thecounter medications, supplements and products you've purchased from a supermarket or health food store, or products prescribed by a complementary therapist (e.g. naturopath, homeopath). They may interact with medications you're taking for your musculoskeletal or other health condition.
- Keep track of your medications. Write down all of the medications, supplements etc that you take.
   There are many medication apps you can download to help you keep all of this information in one place.
- Don't stop taking any medications without first discussing it with your doctor. Some medications need to be gradually reduced, rather than simply stopped, to avoid side effects.
- Consider a Home Medicines Review by an accredited pharmacist. If you're eligible, they're particularly useful if you're taking many medications, or if you have other health conditions. They help make sure you're using your medicines effectively and will help you avoid any unwanted side effects. Your doctor or pharmacist can give you more information about a Home Medicines Review.

## Where to get help

- Your doctor
- Pharmacist
- Medicines Line
  1300 633 424 (1300 MEDICINE) weekdays
- Healthdirect Australia
  1800 022 222 24 hours
- Musculoskeletal Australia

www.msk.org.au

MSK Help Line: 1800 263 265

## How we can help

Call our MSK Help Line and speak to our nurses. Phone 1800 263 265 or email helpline@msk.org.au.

We can help you find out more about:

- arthritis and musculoskeletal conditions
- ways to live well with these conditions
- managing your pain
- upcoming webinars, seminars and other events.

## More to explore

- Consumer info National Prescribing Service
- Medicines Healthdirect
- <u>Medication information</u> Australian Rheumatology Association

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