



Pillar A3:

Understand the usefulness of medication for pain

Be Informed! Make sure you know the name of your medication, how much and how often to take it, and its potential risks & side effects.

Pain medication is generally useful for short-term pain. However, when pain becomes persistent, the medication used to treat it may become less effective and this can be frustrating for you, and for your doctor.

It is helpful to read the information in your medication pack; this will tell you how to take the tablet and any potential problems you need to be aware of.

| NAME OF MEDICATION | DOES IT REDUCE MY PAIN? FOR HOW LONG? | SIDE EFFECTS |
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Paracetamol

What is it used for? Paracetamol is in a class of medicines called analgesics (pain relievers) and antipyretics (fever reducers). It is used to treat mild to moderate pain from various causes such as headaches, muscle aches, menstrual periods, colds and sore throats, toothaches, backaches, arthritis and also to reduce fever.

How does it work? Paracetamol changes the way the body senses pain and by cooling the body although we are not sure exactly how it works.

How and when you should take it? Usually, adults can take up to 2 tablets (2x 500mg) every 4-6 hours apart. The most you can take in a 24-hour period is 8 tablets or 4 grams. Some patients may be advised to take a lower dose by their doctor. Paracetamol can be taken with or without food and there are no specific foods that you need to avoid.

Possible side effects It is unlikely that you will get side effects with paracetamol as long as you take the recommended dose. A lot of over the counter preparations contain paracetamol, such as cold and flu medicines. You must always read the label on any over the counter medicines and ensure that you are not overdosing. Too many paracetamols can cause liver damage and overdose can be fatal.

If you are taking warfarin you may need to monitor your INR if you start or stop paracetamol. Occasional doses of paracetamol should not cause any problems.

Non-steroidal anti-inflammatory drugs (NSAIDs)

What are NSAIDs and what are they used for? NSAID is an abbreviation for Non-Steroidal Anti-Inflammatory Drug, i.e. it is a term used to describe a medicine that can reduce inflammation. Some of the more commonly prescribed NSAIDs include:

Aspirin, Celecoxib, Diclofenac, Etodolac, Etoricoxib, Ibuprofen, Indometacin, Mefenamic Acid, Meloxicam, Naproxen and Piroxicam.

NSAIDs are used to treat a number of painful conditions often where there is inflammation and/or swelling. Examples of where they may be prescribed include sports injuries, such as a sprain or strain, or longer-term problems such as arthritis.

How do NSAIDs work? NSAIDs work by blocking enzymes called COX 1 and COX 2 (COX stands for cyclooxygenase).

Both of these enzymes are important in causing inflammation but also have other important effects in the lungs, stomach and kidneys. Some NSAIDs block both COX 1 and COX 2 while others were developed to specifically block COX 2. The latter are sometimes called coxibs. They were designed to have the beneficial effects of reducing inflammation but with fewer side-effects, particularly on the digestive system. Coxibs are only available on prescription.

When and how do I take NSAIDs? You should take NSAID with a glass of water, with or shortly after food and as directed by your doctor. Some NSAIDs are taken once a day (especially the slow-release types), while others are taken 2–4 times a day.

Consider whether you can use it on an intermittent basis rather than every day. If you are taking a NSAID, as a rule you should take the lowest dose that is effective, for the shortest length of time that is possible. The aim is to ease pain and inflammation but with the least risk of developing side effects.

Topical NSADs

If your pain is localised you can try a topical NSAID. These are gels or creams that you apply directly to the affected area. Some (e.g. ibuprofen and diclofenac) are available over the counter while others (e.g. ketoprofen) are only available on prescription. Some of the drug is

still absorbed into the bloodstream. You should therefore be careful not to use too much gel, especially if you are also taking NSAID tablets, as this may increase the risk of side-effects.

What are the possible side-effects? Side effects tend to be more common if you're taking high doses for a long time, or you're elderly or in poor general health.

- The most common problem with NSAIDs is their effect on the stomach causing symptoms such as heartburn and indigestion including stomach aches, feeling sick and diarrhoea. In some cases this can lead to more serious bleeding from the stomach, requiring hospital admission (extra medication, such as proton pump inhibitors (PPIs), may be prescribed to help reduce this risk)
- Rashes
- Wheeziness and breathlessness (Use of NSAIDs may also worsen asthma)
- Dizziness, drowsiness, fatigue, visual disturbances or headaches
- NSAIDs can increase your blood pressure and are associated with a small increase in the risk of a person experiencing a heart attack or stroke
- They can also damage the kidneys, particularly in older people.
- Your doctor may recommend NSAID that pose less of a risk such as ibuprofen or naproxen
- If you have heart problems, have previously experienced a stroke or think that you might be at risk of these conditions (for example if you have high blood pressure, diabetes or high cholesterol or are a smoker) you should discuss your treatment with your doctor or pharmacist.

If you experience any troublesome symptoms, stop taking your medicine and tell your doctor.

How long do NSAIDs take to work? NSAIDs work quickly, usually within a few hours, although it can take two or more weeks for you to feel the full effect of prescribed NSAIDs.

Can I take other medicines alongside NSAIDs? Some drugs interact with NSAIDs, so you should discuss any new medications with your doctor before starting them, and you should always tell any other doctor treating you that you're on NSAIDs. Some NSAIDs can react unpredictably with other medications. This can affect how well either medicine works and increase the risk of side effects.

It's particularly important to get medical advice before taking an NSAID if you're already taking:

ASPIRIN WARFARIN CICLOSPORIN

DIURETICS LITHIUM METHOTREXATE SSRI (a type of antidepressant)

If you're not sure whether a medication you're taking can be taken at the same time as an NSAID, check the leaflet that comes with it, or ask a pharmacist or doctor for advice.

You shouldn't take more than one NSAID at a time, so if you've been prescribed an NSAID you shouldn't use over-the-counter NSAIDs. Check with your doctor or pharmacist if in doubt.

Antidepressants

What are they used for? The main use for antidepressants is treating depression. They are also used for other mental health conditions and treatment of long-term pain. There are two main types of antidepressants which can reduce nerve pain.

The group of antidepressant drugs that most often help pain are called **Tricyclics antidepressants (TCAs)** e.g. amitriptyline, imipramine, nortriptyline, dosulepin. They have a direct effect in the brain and spinal cord and also on other nerves. Because they affect the nervous system generally, they often cause side effects. Usually after a week or two these side effects reduce. The side effects are less severe if doses are built up gradually. They can affect heart rhythm in some people. These drugs need to be taken regularly and it may take a few days for them to have an effect.

SNRIs (Selective Noradrenaline Reuptake Inhibitors) eg. duloxetine (Cymbalta®). Duloxetine has a license in the UK for the treatment of diabetic neuropathy.

Many of the other groups of antidepressants, notably the newer ones acting purely on serotonin (SSRI's) such as paroxetine, fluoxetine and similar drugs, do not work well for pain although they can be effective for depression.

How antidepressants work for pain? Antidepressants increase the levels of certain brain chemicals that improve mood and regulate pain signals. Low doses of antidepressants also relieve pain, although it is not known exactly how. They often give pain relief at far lower doses than are required for depression. They give benefit for pain by their direct effect on pain, and also through beneficial effects on sleep.

Amitriptyline

Does it work? Amitriptyline probably does give really good pain relief to some people with neuropathic pain, but only a minority of them; amitriptyline will not work for most people.

When and how should I take it?

- It is best to take amitriptyline in the evening. Start by taking it one hour before going to bed, if you find that you feel drowsy the next morning, try taking it earlier in the evening.
- The tablets should be swallowed whole, with a glass of water on an empty or full stomach.

How long will it take to work? Every patient is different. You may notice some initial benefit within 2 weeks; however, it may take up to 2 months for a full effect.

What are the possible side effects?

Most side effects are mild and it is expected that they tend to go away after a few doses.

- Common side effects include; drowsiness, dizziness, dry mouth, constipation and sweating. If you have these side effects and they are severe contact your doctor or pharmacist for advice.
- Less common side effects include fainting, trembling, irregular heartbeat, blurred vision or problems passing water. If any of these side effects occur contact your doctor or pharmacist for advice.

Can I take this medication long-term? Yes, if it helps. You may wish to reduce treatment every so often, to check if your pain is still a problem. This should be done with the advice of your GP or pain specialist, gradually reducing your medication over a period of time.

Duloxetine

Does it work? Duloxetine does not work for everyone. Evidence shows that duloxetine is useful for treating pain caused by diabetic neuropathy and probably fibromyalgia but more research is required for more information.

When and how should I take it?

- It is best to take duloxetine at the same time each day. Most people take it in the morning. If you find that you feel drowsy after taking it in the morning, try taking it in the evening.
- The capsules should be swallowed whole, with a glass of water on an empty or full stomach.

How long will it take to work? Every patient is different. You may notice some initial benefit within 1 week, however it may take up to 1 month for a full effect. Your doctor may need to increase the dose to get the maximum effect.

What are the possible side effects? Most side effects are mild and can be expected to go away after a few doses.

- Common side effects include; headache, drowsiness, sickness (nausea), dizziness, blurred vision and dry mouth. If you have these side effects and they are severe contact your doctor or pharmacist for advice.

- Less common side effects include loss of appetite, flushes, raised blood pressure, difficulty sleeping, feeling anxious, shaky and increased sweating. If any of these side effects occur contact your doctor or pharmacist for advice.
- About one in six people stop duloxetine because of side effects.

Can I take this medication long-term? Yes, if it helps. You may wish to reduce treatment every so often, to check if your pain is still a problem. This should be done with the advice of your GP or pain specialist.

Anticonvulsants (antiepileptic drugs)

What are they used for? Anticonvulsant drugs are group of drugs that are commonly used in the management of pain but are primarily designed for epilepsy. Among the anticonvulsants which are often used for pain are older ones such as carbamazepine and sodium valproate, and newer ones such as gabapentin and pregabalin, though a number of other drugs are also used. Carbamazepine (Tegretol®) is very useful in trigeminal neuralgia (TGN).

These drugs are not effective for all people with nerve pain and can often have side effects such as drowsiness or dizziness. These side effects can be minimised by starting at a low dose and then slowly increasing, and if necessary stopping at a lower dose for a while before continuing to increase.

Nerve pain can be a very severe and distressing problem but often the pain reduction with these drugs is no better than 50%.

Sometimes combinations of different anticonvulsants or combinations with antidepressants or other drugs may be useful for difficult pains: this allows combinations of different mechanisms of action to be used.

How anticonvulsants help my pain? They work by decreasing the excitability of nerves which may be firing too much causing over-stimulation and resulting in pain. Essentially, what happens in this situation is that the nerves are often developing their own epileptic type activity and it is for this reason that the anticonvulsants can be helpful.

Gabapentin

Does it work? Gabapentin is helpful for some people with chronic neuropathic pain and preventing migraines (“off licence”). It is not possible to know beforehand who will benefit and who will not. Current knowledge suggests that a short trial is the best way of finding out.

When and how should I take it?

- Normally a minimum dose of gabapentin 300mg three times per day is needed to get any benefit and the dose may need to be increased in stages up to 1200 mg three times per day.
- If you are taking antacid medication, it is best to wait for two hours after taking it, before taking gabapentin.
- The capsules should be swallowed whole, with a glass of water on an empty or full stomach.

How long will it take to work? Every patient is different. You may notice some initial benefit within a few days; however, it may take up to 2 months for a full effect.

Gabapentin does not work for everyone. If you do not feel any improvement in your pain after 6 – 8 weeks, do not suddenly stop taking the tablets but speak to your doctor.

What are the possible side effects? Most side effects are mild, and it is expected that they will go away after several days. Generally side effects are worse after starting to take gabapentin or increasing the dose. It is important to persist in taking gabapentin as these side effects usually wear off.

- Common side effects include; drowsiness, dizziness, fatigue and muscle tremor. If you have these side effects and they are severe contact your doctor or pharmacist for advice.
- Less common side effects include vision disturbances, indigestion, weight gain, leg swelling, memory loss, mood changes or hallucinations and a rash. **It is important that if any of these** side effects occur contact your doctor or pharmacist for advice.

Can I take this medication long-term? Yes, if it helps. You may wish to reduce treatment every so often, to check if your pain is still a problem. This should be done with the advice of your GP or pain specialist.

Pregabalin

Does it work? Pregabalin has proven efficacy in neuropathic pain conditions and fibromyalgia. A minority of patients will have substantial benefit with pregabalin, and more will have moderate benefit. Many will have no or trivial benefit or will discontinue because of adverse events.

When and how should I take it?

- Normally a minimum dose of pregabalin 75mg twice a day is needed to get any benefit and the dose may need to be gradually increased up to 300mg twice a day.
- If you are taking antacid medication, it is best to wait for two hours after taking it before taking pregabalin.
- The capsules should be swallowed whole, with a glass of water. Pregabalin may be taken on an empty or full stomach.

How long will it take to work? Every patient is different. You may notice some initial benefit within a few days; however, it may take up to 1 month for a full effect. You may need to increase the dose for pregabalin to be effective. Pregabalin does not work for everyone. If you do not feel any improvement in *your pain after 4 – 6 weeks, do not suddenly stop taking the medicine but speak to your doctor.*

What are the possible side effects? Most side effects are mild and it is expected that they will go away after several days. Generally side effects are more troublesome just after starting pregabalin or increasing the dose. It is important to persist in taking pregabalin as these side effects usually wear off.

- Common side effects include; drowsiness, dizziness, fatigue and muscle tremor. If you have these side effects and they are severe contact your doctor or pharmacist for advice.
- Less common side effects include vision disturbances, indigestion, weight gain, leg swelling, memory loss, mood changes, hallucinations or rash. **It is important that if any of these side effects occur, contact your doctor or pharmacist for advice.**

Can I take this medication long-term? Yes, if it helps. You may wish to reduce treatment every so often, to check if your pain is still a problem. This should be done with the advice of your GP or pain specialist.

Opioids

The Royal College of Anaesthetists current guidelines (NHS England)

“If opioids are not effective at 120mg equivalent of morphine in 24 hours, increasing the dose is not likely to be effective and they should be tapered and stopped.”

How do opioids work and what are they used for? Opioids provide pain relief by acting on areas in the spinal cord and brain to block the transmission of pain signals. Opioids are considered to be some of the strongest painkillers available and are used to treat pain after surgery, serious injury and cancer. Opioid drugs can help

manage some but not all types of chronic pain. Examples include: codeine, dihydrocodeine, tramadol, morphine, oxycodone, fentanyl, buprenorphine etc.

What are the possible side effects? When you first start taking opioids you can get some side effects, which usually stop after a few days. These include:

- feeling dizzy
- feeling sick (nausea)

Make sure you know your options

Talk to your health care provider about ways to manage your pain that don't involve prescription opioids. Some of these options may actually work better and have fewer risks and side effects.

- being sick (vomiting)
- feeling sleepy
- feeling confused

Sometimes these side effects can go on for longer than a few days. Your health-care team may give you some other medicines to help, such as anti-sickness tablets.

If pain has affected your sleep, opioids may help you to recover your normal pattern of sleep, but they should not make you drowsy in the daytime.

Opioid medicines can cause some problems when you take them for long periods of time. These problems include:

- constipation (This is a common problem when taking opioids and does not tend to go away the longer you take opioid medicines. You may need to try laxatives to treat constipation. If you experience a lot of side effects your team may suggest changing to another opioid drug)
- itching
- weight gain
- lack of sex drive
- difficulty breathing at night (This is most common if you are overweight and if you snore heavily. If you have a condition called obstructive sleep apnoea it may not be safe for you to take opioids)

Can I take this medicine long-term? While opioids can have a positive benefit for some people living with long-term pain, they can have serious consequences when they are not providing sufficient benefit or are being taken in a manner that was not intended.

It is important to consider the risks and benefits of continued opioid therapy with your prescriber on a regular basis. Recent medical literature suggests that the risks to your health increase significantly when prescribing opioids at high doses for a long period of time. If you take opioid drugs for many months or years it can affect your body in a number of ways.

These problems include:

- reduced fertility
- low sex drive
- irregular periods
- erectile dysfunction in men (the inability to keep an erection)

- reduced ability to fight infection
- increased levels of pain

Everyone prescribed opioid medicines in the long-term should have them reviewed by their prescriber at regular intervals. If this does not happen ask your General Practitioner.

If you want to try reducing your dose, you should discuss this with your doctor and bring the dose down slowly.

Many people find that after a few months they can reduce their opioid dose without the pain increasing. Many individuals are able to reduce gradually their opioid dose and find that their pain is no worse. As fewer side effects are experienced, quality and enjoyment of life can improve. All of this contributes to greater physical fitness.

Will my body get used to opioid medicines? Opioids can become less effective with time (this is called tolerance) meaning your body has got used to the pain relieving effect of the medicine. You can also become dependent on opioid medicines (dependence). This means that if you stop taking the drug suddenly, or lower the dose too quickly, you can get symptoms of withdrawal. If you run out of medicine, you can experience the same symptoms that include:

- tiredness
- sweating
- a runny nose
- stomach cramps
- diarrhoea
- aching muscles

Avoid alcohol while taking prescription opioids. Also, unless specifically advised by your health care provider, medications to avoid include:

**Benzodiazepines
Hypnotics**

**Muscle relaxants
Other opioids**

What about addiction to opioids? It is rare for people in pain to become addicted to opioids. People who are addicted to opioids can:

- feel out of control about how much medicine they take or how often they take it
- crave the drug
- continue to take the drug even when it has a negative effect on their physical or mental health

We do not know exactly how many people get addicted when they are taking opioids for pain relief, but it is very uncommon. It is more common if you have been addicted to opioids (including heroin) or to other drugs (or alcohol) before. Addiction may be more common in people with severe depression or anxiety. This does not mean that if you have had an addiction problem before or you are very depressed and anxious you will become addicted. It only means that you are more likely to become addicted than someone who has not had these problems. Most people do not become addicted.

What if I want to stop taking my pain medication

If you decide to reduce your medication there are some simple rules to follow.

Any drug that works on your brain and central nervous system should be stopped slowly. If you stop strong painkillers, tranquillisers or sleeping tablets too quickly, you may have withdrawal symptoms such as: anxiety, sweating, increased pain, insomnia, feeling as if you have 'flu.

However, if you stop your drugs slowly, your body adjusts back gradually to its normal functioning and your natural painkilling chemicals (endorphins) start to be manufactured again.

What's the best way to reduce? If you normally take 8 tablets per day, take 7 tablets per day for one week. Take your medication at regular times. Then take 6 tablets per day for one week. Keep reducing gradually and steadily.

Keep a record of your progress and set dates for each stage of your reduction

Won't my pain be worse? You may be taking several drugs and still be in pain. Drugs may, perhaps, "take the edge off" but many people still report being in pain all the time. The good news is that pain management makes you feel more comfortable for longer and is, therefore, more effective than medication in the long-term. Relaxation, pacing, distraction and increasing your fitness all reduce pain levels and enable you to manage your pain better without drugs.

Many people who have been through pain management programmes are now drug-free. They say that their pain is no worse than before (some report reduced pain without medication!).

Points to remember:

Problems

- Painkillers don't take away all the pain
- They may have unpleasant side effects
- Strong painkillers can damage your health and can increase your pain and reduce your sex hormone levels
- Stronger painkillers can become less effective over time
- Both you and your doctor might become frustrated trying to "cure the pain"
- You might need more tablets for the side effects of the painkillers
- Painkillers are not a "magic bullet" , often it's a case of trial and error to try and find anything suitable. There is no "one size fits all" when it comes to painkillers.

Solutions

- Used sensibly, painkillers can be a helpful part of your "toolkit"
- Using pain management techniques can help you feel better
- Using pain management techniques as a way of life can reduce your reliance on medication.
- Reducing strong painkillers slowly is safe and often people do not feel more pain after stopping.
- Learning more about how, and when to use your medication will make you feel more in control
- Taking medication at regular intervals can help as part of your set-back/flare up plan
- Many people manage pain without medication.
- Always read the leaflet in your medication packet and let your doctor know if you have unpleasant side effects or if you feel that they are not helping. (your doctor needs your feedback - only you will know if your pain medication is helping you).

IMPORTANT: Never take medication that has been prescribed for someone else and never, ever, buy medication on the internet. Medication bought online is not regulated and you can never be sure what is in it.