

Medicines for long-term pain

Gabapentin and pregabalin





This leaflet is about gabapentin and pregabalin, two drugs which are part of a group sometimes called gabapentinoids. The leaflet will give you some background about gabapentin and pregabalin and help you to understand how to use them in the way that's best for you.

Before taking medication for long-term pain

You should discuss with your doctor or other healthcare professional what you expect from treatment with pain medicine.

Pain-relieving medicines (painkillers) are generally the first step in treating pain after surgery or an injury. However, it is rarely possible to relieve long-term pain completely with painkillers. The aim of treatment is to reduce your pain enough to help you get on with your life.

Medicines work best if you combine them with other ways of managing symptoms, such as regular activity and exercise, and doing things that you enjoy, such as work or study and social activities. Setting goals to help improve your life is an important way to see if these drugs are helping.

What are gabapentin and pregabalin?

Gabapentin and pregabalin are medications used to treat neuropathic (nerve) pain.

What is neuropathic pain?

Neuropathic pain is a result of damage to the nervous system itself that results in nerves sending out messages that are either incorrect or unhelpful.

Examples of neuropathic pain are the burning or tingling in the feet caused by diabetes, pain following shingles (post-herpetic neuralgia), or pain following a pinched or trapped nerve.

Words that people use to describe their neuropathic pain include:

- tight;
- shooting;
- electric;
- tingling;
- burning;
- piercing;
- freezing; or
- stabbing.

Neuropathic pain is often compared with 'nociceptive' pain, which is the pain more commonly due to tissue

damage and inflammation (such as a sprained ankle or broken bone, or after surgery). However, many painful conditions, especially those that have gone on for some time, may have a combination of neuropathic pain and nociceptive pain, and simple painkillers as well as medication for neuropathic pain will be needed.

There are different types of neuropathic pain, which can be broadly categorised into peripheral neuropathic pain and central neuropathic pain. The peripheral form arises from damage to the nerves which reach your organs and extremities (hands and feet) and that have pathways outside the spinal cord and brain. These pathways may be very long (such as all the way to your toes) or relatively short (for some of the nerves affecting your face and head). Causes of peripheral neuropathic pain already mentioned include diabetes, infections and direct nerve damage, but the list is long and includes the effects of cancer and treatment for cancer such as medication and radiation therapy.

Central neuropathic pain comes from damage to your brain or spinal cord and might be from, for example, a stroke or something causing abnormal pressure, or multiple sclerosis.

Why am I being prescribed a gabapentinoid?

Your doctor will prescribe a gabapentinoid because they have decided you have some form of neuropathic pain.

Doctors recommend gabapentin and pregabalin as the drugs to try first for neuropathic pain (except if you have trigeminal neuralgia, in which case they would recommend a different drug). You can find more information and details of other drugs that doctors would prescribe in the NICE guidance for neuropathic pain in adults. National and international experts repeatedly recommend, in a number of different guidelines, that gabapentin and pregabalin should be the first-choice drug when treating neuropathic pain.

How do they work?

Gabapentin and pregabalin are used to treat both neuropathic pain and epilepsy. Neuropathic pain can come on with no warning or for no apparent reason. As with epileptic fits, nerve pain can be unpredictable. These two drugs are useful for neuropathic pain and epilepsy as they stabilise the nervous system in some way, although the ways in which gabapentinoids work are not fully understood.



Gabapentinoids are similar in structure to a substance called GABA (gamma amino butyric acid) that occurs naturally in our nervous system. GABA is a neurotransmitter. Neurotransmitters are chemical messengers that allow our nerves to communicate with one another. They are released to do their work by an electrical nervous impulse activating a 'switch' called a calcium ion channel. Gabapentinoids bind to calcium ion channels, which probably contributes to their effect on nerve transmission and reducing pain. They are also thought to have more widespread effects.

How do I take them?

Gabapentin and pregabalin are prescribed as tablets or capsules.

Gabapentin is usually taken three times a day. It is started at a low dose and gradually increased to the dose that is effective. Some people may find they need quite a high dose to adequately reduce their pain. The usual starting dose is 300mg once a day on the first day, 300mg twice a day on the second day, and 300mg three times a day on the third day. However, your doctor may adjust this to suit you. The daily dose for most people is between 900 and 3600 mg per day. If you need larger doses there are also larger-dose

tablets available, so that you do not have to take several 300mg tablets at once.

Pregabalin is usually taken two or three times a day. Like gabapentin, it is increased from a lower dose up to a dose that is effective. The usual starting dose is 75mg twice a day and this is increased as necessary over the next three to seven days. The maximum daily dose of pregabalin is 600mg and it is available in a variety of tablet sizes.

Many patients describe benefits from gabapentinoids fairly soon after starting them, although for some people it will take a while to reach an effective dose. The full effects may also take some weeks to develop.

If you are going to stop taking gabapentinoids you should discuss this with your doctor who will advise you to reduce your dose over a period of at least a week.

When should I take it?

It is best to take gabapentin and pregabalin regularly. You do not need to take them with food. If you are taking them twice a day, you should take them 12 hours apart. If you are taking them three times a day, you should take them eight hours apart. The timing is not critical, so if you



are an hour or two late in taking your medication, don't worry. If you miss a dose, take the next dose at the normal time – there is no need to take anything extra for the missed dose.

Gabapentin and pregabalin can sometimes make people drowsy or dizzy. If this happens to you, take care with what you plan to do. You should not operate machinery, drive a vehicle or be in charge of any situations where this is important. Many people get used to these side effects, and after a few weeks they are no longer an issue. Also, alcohol may increase the sedative effects of gabapentinoids and this could make you more drowsy.

If you have reduced kidney function your doctor will need to reduce the dose of both gabapentin and pregabalin.

Antacids (for example, heartburn tablets) can reduce the amount of gabapentin that is absorbed from the stomach, so if you have taken a medication containing aluminium or magnesium to reduce stomach acid it is best not to take gabapentin until two hours have passed.

You should continue taking both gabapentin and pregabalin until your doctor advises you not to. If you are going to stop taking them, your doctor will give you a plan to reduce

your dose, often over a week. You should not stop this sort of medication abruptly.

Gabapentin and pregabalin are designed to be taken for long periods of time. Many people have been taking them successfully for years. If you have any further questions, the patient information leaflet which comes with the medication may be helpful, or your doctor or pharmacist will be able to give you advice and answer any queries.

Are there any side effects?

Many of the side effects of gabapentin and pregabalin get less in time. The list of side effects below is not a full list – see the patient information leaflet for a complete list. Please remember that many people take gabapentin and pregabalin without any side effects, or with mild effects which they put up with as they find the benefits outweigh any mild reactions.

Common side effects with both gabapentin and pregabalin are:

- drowsiness;
- dizziness;
- feeling tired;
- mood changes; and
- swelling in the leg (oedema).

Some serious side effects which you should report immediately to your doctor are:

- severe skin reactions (rashes);
- allergic reactions (for example, rashes or swelling of the lips and tongue);
- thoughts of harming or killing yourself; and
- persistent abdominal pain (this may be due to an inflamed pancreas).

Cases of abuse (taking too many) and dependence have been reported with gabapentinoids, although they are not common. Please talk to your doctor about this if you have a history of drug abuse or dependence.

Are there any reasons to avoid gabapentinoids?

People with reduced kidney function may not be able to take gabapentinoids, or may need their dose reduced.

You should see your doctor if you become pregnant, or are planning to become pregnant or breastfeed, as gabapentin and pregabalin should not normally be taken during pregnancy or while breastfeeding.



Are there any alternatives?

Gabapentin and pregabalin may not work for everyone. If you are not seeing any benefits after a few weeks, you should talk to your doctor about either increasing the dose or stopping the medication. If you find the medication is giving you side effects, it may be worth trying a different gabapentinoid.

There are alternative medications for neuropathic pain or which can be taken alongside gabapentinoids. These are amitriptyline and duloxetine and, for trigeminal neuralgia, carbamazepine.



If your pain is severe or not responding to drugs, you may need to be referred to a specialised pain centre to try alternative medications and therapies. For many people with longer-term pain, management strategies such as physical therapy, or psychological therapies such as cognitive behavioural therapy (CBT), may also play a significant role in helping people manage their symptoms and lead a fulfilling life.

Doctor's viewpoint

Over the last few decades, gabapentin and pregabalin have changed the lives of many patients with neuropathic pain. These drugs can make troublesome and intrusive symptoms of nerve damage totally manageable. However, some people need some extra help with different combinations or alternative medications. The key is to treat each patient individually, and to sometimes ask specialised pain clinics for help.

The author: Dr John Lee is a consultant in pain medicine who has been working in the field of pain management for the last 20 years. He has published widely in this field.

The regulations controlling medicines change from time to time. For the latest information, please visit www.painconcern.org.uk, where you can also find out more about the evidence supporting this publication.

PAIN MEDICINES FOR LONG-TERM PAIN

Leaflets in this series include **Opioids, Gabapentin and pregabalin** and **Antidepressants**. You might also like our **Managing your medications** leaflet.

Gabapentin and pregabalin © John Lee. All rights reserved. October 2017. To be reviewed October 2020. This information is not intended to replace your doctor's advice. We advise you to read the manufacturer's information for patients, which your pharmacist will give you with your medication. Keep all medicines away from children.



Pain Concern is a charity providing information and support to people with pain and those who care for them, whether family, friends or healthcare professionals.

Find out more at **painconcern.org.uk**

**Listen to Airing Pain
radio show • online • on CD**

**Read Pain Matters magazine
news • features • opinion**

Call our information helpline

0300 123 0789

or email

help@painconcern.org.uk

**Pain Concern, 62-66 Newcraighall Road,
Edinburgh EH15 3HS, tel. 0300 102 0162**

**Charity no. SC023559, a company limited by
guarantee no. SC546994**

