

Patient information from BMJ

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Trigeminal neuralgia

Trigeminal neuralgia is a very painful condition that affects the face. There is no cure but there are treatments that can help.

We've looked at the best and most up-to-date research to produce this information. You can use it to talk to your doctor and decide which treatments are right for you.

What is trigeminal neuralgia?

If you have trigeminal neuralgia you get sudden, short attacks of pain in your face. They usually affect just one side of your face, and they keep coming back.

The pain comes from a nerve in the face called the trigeminal nerve. Normally this nerve would only send pain signals to the brain if something causes you pain, such as being struck in the face. But if you have trigeminal neuralgia, the pain can happen randomly without any external cause.

Trigeminal neuralgia seems to be especially common in people with a condition called multiple sclerosis. It's also more common in people aged over 50, and it's slightly more common in women than in men.

There is still debate about what causes trigeminal neuralgia. There may be several different causes. But, in most people, trigeminal neuralgia seems to be caused by small blood vessels in the face pressing on the trigeminal nerve. This is called trigeminal nerve compression.

What are the symptoms?

Trigeminal neuralgia is very painful. You get a sudden, severe, stabbing pain. Some people describe it as feeling like an electric shock.

Most people with this condition feel the pain in or around the cheek or jaw areas. This can include the lower eyelids, nostrils, lips, and gums. Some people feel pain around the eye or forehead, but this is less common.

The pain can last from a few seconds to a few minutes at a time. It usually affects just one side of the face.

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Attacks of pain can come on without warning. But they can be triggered by simple things like talking, eating and drinking, cleaning your teeth, brushing your hair, shaving, and facing into the wind.

Your attacks may come one right after another, or they might come and go. You might have a series of painful attacks lasting for weeks. Or they might stop for a long time.

There is no test for trigeminal neuralgia. Your doctor will examine your face and ask you questions about your pain. You may need to be checked for other conditions.

If your doctor is not sure about the diagnosis, you may need to go to hospital for an MRI (magnetic resonance imaging) scan. This can show whether you have blood vessels pressing on the root of your trigeminal nerve. An MRI scan can also rule out a more serious cause for your pain.

What treatments work?

There are several different treatments for trigeminal neuralgia. The aim is to reduce your pain as much as possible. You'll probably be offered medicine first. If that doesn't work you may want to discuss having an operation.

Things you can do for yourself

You may notice that certain things trigger an attack of pain. There may be some things you can do to avoid these triggers.

For example, you could:

- avoid sitting in the direct blast of an air conditioning unit
- protect your face with a scarf when you go out in cold weather
- avoid very hot or very cold drinks or food
- use a drinking straw. This can help you avoid getting a hot or cold drink on the area of your mouth where pain occurs
- use pain-free periods to eat
- ask your doctor for help if you feel depressed. It's not surprising that many people who have long-lasting painful conditions get depressed. But there are treatments that can help with depression.

Medicines

The main drug treatments for trigeminal neuralgia are medications called **anticonvulsants**. These drugs are usually used to treat epilepsy, but they can also help reduce the pain of trigeminal neuralgia. Up to three-quarters of people get some pain relief from these medications.

You normally start on a low dose and build up gradually until you find the dose that best treats the pain. You then have to take the medication regularly. But they seem to work less well the longer you use them.

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These drugs can cause side effects in some people. The most common ones are drowsiness, dizziness, and constipation.

If you get a rash while taking these drugs you should seek medical advice immediately. The rash could be a sign of a serious allergic reaction.

But you shouldn't stop taking anticonvulsants suddenly without talking to a doctor. This is because suddenly stopping taking these drugs can cause seizures, even in people who do not have epilepsy.

Medicines other than anticonvulsants are sometimes tried for trigeminal neuralgia. For example, a drug called baclofen has been found to help some people who didn't improve with anticonvulsants.

Surgery

If medicines don't work you may decide you want to talk to your doctor about having surgery. The main surgical treatment for trigeminal neuralgia is an operation called **microvascular decompression**. The aim is to reduce pain by relieving the pressure on the trigeminal nerve from surrounding blood vessels.

This operation can often be done as an outpatient procedure and usually only needs a local anaesthetic.

As with any operation, surgery for trigeminal neuralgia can cause complications in some people. These include loss of hearing in one ear, weak face muscles, numbness in the face, and double vision.

Other techniques are sometimes used.

Stereotactic radiosurgery involves delivering high doses of radiation to deaden the nerve. It does not involve any cutting but it is probably less effective than microvascular decompression.

Nerve blocks seem to be effective in most people. But many people find that their symptoms return within a few years.

Balloon compression of the nerve involves inserting and inflating a small balloon under the skin near the nerve. This stops the nerve from working. It does not seem to work as well as microvascular decompression but it may have fewer side effects.

Peripheral neurectomy involves removing part of the nerve. It does not seem to work as well as some other surgical techniques and it causes some loss of feeling in the face. Your doctor will probably only suggest this treatment if nothing else has worked.

All these procedures carry risks. You can ask your specialist about the different options, how well they are likely to work for you, and how likely you are to get complications.

What will happen to me?

You may have long periods free of pain. But, as you get older, trigeminal neuralgia attacks can get more frequent and more painful. The pain-free intervals can become shorter. And some people eventually have background pain all the time.

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Where to get more help

There are various charities and support groups to help people with trigeminal neuralgia. Your doctor may be able to put you in touch with one in your area. For example, in the UK, the Trigeminal Neuralgia Association UK (tna.org.uk) is a charity providing information and support to people living with trigeminal neuralgia.

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