Trigeminal Neuralgia

What are the aims of this leaflet?

This leaflet has been written to help you understand more about trigeminal neuralgia. It tells you what it is, what causes it, what can be done about it, and where you can find out more about it.

What is trigeminal neuralgia?

Trigeminal neuralgia is a condition that affects the trigeminal nerve, one of the large nerves of the face and mouth. This condition causes sudden attacks of very severe pain on one side of the face. The pain is usually sharp, stabbing or electric shock-like, and may be triggered by touching the face, shaving, chewing or tooth brushing.

The painful attacks usually last from a fraction of a second to a few minutes and can occur several times a day for days, weeks or months at a time. Some people experience a constant dull ache between episodes of pain. It is also possible for the pain to disappear completely and not reoccur for months or years. Trigeminal neuralgia is more common in women than men, and usually occurs in people over 50 years of age.



What causes trigeminal neuralgia?

In many cases, the cause of trigeminal neuralgia is unknown. However, in some people the symptoms may be due to a blood vessel pressing on the trigeminal nerve in the skull. This causes pain and stops the nerve working properly. Trigeminal neuralgia symptoms, in rare cases, may be due to diseases such as multiple sclerosis or a tumour pressing on the nerve.

Is trigeminal neuralgia hereditary?

Rarely, trigeminal neuralgia may occur in members of the same family.

What are the symptoms of trigeminal neuralgia?

Trigeminal neuralgia is characterised by repeated attacks of severe, sharp, shock-like pain in the face or mouth. Attacks usually last from a few seconds to 2 minutes and can occur spontaneously (for no reason) or can be triggered by light touch, speaking, eating, shaving, hair brushing or tooth brushing, head movements or a cool breeze. You may find that there are particular 'trigger zones' on your face or in your mouth, and that touching these areas causes an attack to occur. Trigeminal neuralgia usually only affects one side of the face but in rare cases can be bilateral (both sides). The pain can be in the lower jaw, upper jaw, cheek, and less often the eye and forehead depending on which branch of the trigeminal nerve is affected.



What does trigeminal neuralgia look like?

There are no outward physical signs of this condition. People with trigeminal neuralgia can have a normal looking, healthy face and mouth. The lack of outward signs of this condition can make it hard for others to understand this condition.

How is trigeminal neuralgia diagnosed?

There is no diagnostic test for trigeminal neuralgia; the diagnosis relies largely on your description of your symptoms. Radiographs (X-rays) of the teeth or jaw may be taken to help rule out other reasons for the pain and sometimes blood tests may be required.

Your specialist may also recommend a MRI (magnetic resonance imaging) scan to assess whether the disorder has been caused by a blood vessel pressing on the nerve and to rule out any other causes for the pain.

Can trigeminal neuralgia be cured?

There is no cure for trigeminal neuralgia, but there are many options available to control the pain. The disease can also become dormant for long periods or may disappear altogether without any specific treatment.



How can trigeminal neuralgia be treated?

Initial treatment for trigeminal neuralgia is usually with medicines to control the painful attacks.

- Common pain relief medications like paracetamol or ibuprofen have not been found to be useful in the treatment of trigeminal neuralgia, nor are stronger medications such as morphine.
- The most effective medicines to treat trigeminal neuralgia are anti-convulsants (anti-epilepsy medications). To be effective, these medications must be taken all the time not just when pain is present. The most commonly used medication is called carbamazepine. This medication is successful in controlling the symptoms of trigeminal neuralgia in most people. It has side effects, most commonly dizziness, drowsiness and difficulties with memory and concentration. Blood monitoring is also required to assess the effects of the drug on the liver and on blood.
- Other anti-convulsant medications can be used in the treatment of trigeminal neuralgia e.g. oxcarbazepine or lamotrigine. Some people find a combination of different medications works best to reduce their symptoms.
- In prolonged severe attacks of pain, a local anaesthetic injection (similar to those
 given by dentists) into the trigger area may provide some relief for a few hours
 and allow the medications to work more effectively.



 Your GP may be able to advise you as to the best type of treatment initially, but if this is not effective you may need a referral to a specialist in Oral Medicine or Neurology.

Surgical treatment

If the medications are not well tolerated, then you may need a referral to a neurosurgeon who may be able to provide alternative surgical treatments. If an MRI scan shows that there is a blood vessel pressing on the nerve, you may be offered an operation to decompress the nerve (move the blood vessel away from the nerve) inside the skull, called microvascular decompression. In other instances, operations directly treating part of the nerve are possible and include:

- Radiofrequency thermocoagulation rhizotomy application of a heated wire to the nerve
- Balloon compression inflation of a balloon against the nerve
- Glycerol rhizotomy deposition of a liquid called glycerol adjacent to the nerve
- Stereotactic radiosurgery ("Gamma Knife®") is a form of radiation therapy that focuses high-power energy on the trigeminal nerve.



What can I do?

- Maintain good oral hygiene and visit your dentist regularly to prevent any tooth decay which may exacerbate your trigeminal neuralgia. If you cannot brush your teeth, use an antibacterial mouthwash such as chlorhexidine.
- If you can identify the activities that trigger an attack of trigeminal neuralgia, you can take steps to avoid those triggers. You may consider measures such as covering your face when going out in cold weather, drinking through a straw to avoid touching a trigger zone in your mouth, and avoiding very hot or very cold foods and drinks.
- When you have been started on a medication for trigeminal neuralgia, or the dose of your medication has been changed, it is a good idea to keep a pain diary, so that you can record your progress. This will help you and your specialist to decide whether you are on the most effective treatment. You can record the severity of your pain, how often you are having attacks, any medication side effects and the dose of medication you are taking. It is important to start medication at a low dose and increase slowly.
- If you find that you are feeling sad or unable to cope with your condition, you
 should seek professional help. It is common for people with chronic pain
 conditions to develop a low mood, and there is treatment available to help.



Where can I get more information about trigeminal neuralgia?

Further Information

Trigeminal Neuralgia Association (UK) - https://www.tna.org.uk/contact/

This leaflet has been prepared by the British and Irish Society for Oral Medicine (BISOM). It is reviewed periodically to reflect relevant advances and improved understanding. Not all the information will be relevant to all patients. For individual advice please see your Oral Medicine specialist. The BISOM is not responsible for information on web sites where links are provided.

This leaflet is available online at www.bisom.org.uk

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