



**Pain Management Unit
Ipswich Hospital
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**East Suffolk and
North Essex
NHS Foundation Trust**

Trigeminal Neuralgia

Trigeminal neuralgia is a rare, severe nerve pain in part of the face. It tends to be shooting, like an electric shock, and can be very severe. It can be bad enough to stop sufferers washing their face, being in a cold draught and even eating or talking. Most people with this problem have it in severe bouts which can last several months and then settle. However, the pain tends to recur.

The pain comes from irritation of the **trigeminal ganglion**, the nerve centre just inside the skull. This irritation may be from blood vessels pressing on the ganglion. It can be confused with toothache, and many people with this pain will consult their dentist when they first get it.

What treatments are available?

This kind of nerve pain does not respond well to normal pain relief medications – even strong ones such as morphine. The best drugs to lessen the pain are **anticonvulsants**, which were originally developed for the treatment of epilepsy. These work well on settling the over-irritable nerves that are causing the pain, but they need to be taken regularly and are slow acting.

The drugs most commonly used are carbamazepine or gabapentin. Occasionally other drugs such as baclofen or lamotrigine can be used. All these can have side effects, especially drowsiness or dizziness, and these side effects have to be weighed up carefully against any benefits the drugs may have in relieving pain.

The most common procedures at the Ipswich Hospital for trigeminal neuralgia are:

1 Injection of glycerol to the trigeminal ganglion

This procedure is usually done under general anaesthetic unless there are special circumstances, which would be fully discussed with you beforehand. You may need to stay in hospital overnight after the procedure.

The procedure involves injecting the trigeminal nerve which is located under the cheek. Unfortunately, we cannot guarantee that this will work. The success rate is about 1 in 2, or 50%, but the effect of the injection does not generally last for more than 1–2 years.

There are risks involved in the procedure which are:

- **Bruising and bleeding** – these are not usually severe, but occasionally there can be bad swelling of the cheek. You must tell the doctor if you bleed easily or if you take warfarin or clopidogrel (Plavix). Bleeding inside the skull could cause a stroke, but this is very unlikely.



- **Headache** – can be quite severe for several hours. It would be unusual for it to be more persistent.
- **Facial numbness** – is common but not usually too severe. There is a small risk (1 in 100) that you may have continued numbness and severe pain (anaesthesia dolorosa) which is very unpleasant.
- **Eye numbness** – the eye is covered by a sensitive clear membrane (the conjunctiva) – which protects it from damage. There is a 1 in 20 risk of this being numbed which could lead to corneal scarring and impaired sight. If this numbing of the cornea occurred you would have to wear protective glasses which would lessen the risk of scarring but not prevent it completely.
- **Infection** – this is very rare but the injection can cause meningitis which can be fatal. The chances of an infection like this are small (about 3 per 1000). The chances of it being fatal are even rarer (about 1 in 7000).

2 Pulsed radio frequency treatment (PRF)

Pulsed radio frequency treatment (PRF) for trigeminal neuralgia is usually performed under deep sedation. An insulated needle is introduced through the skin and advanced to the nerve root under direct X-ray guidance. An electrical current is passed down the needle to either heat the nerve or, by pulsing, produce a high electrical field around the nerve root.

During the procedure you will be comfortably awakened and be able to respond to some questions to confirm that the treatment is applied to the correct area. You may need to stay overnight after this procedure.

Success rates are generally high but recurrences may occur months or years later. The technique can be readily repeated. Side effects are rare. These include facial sensation and can be minimized by keeping the current and duration of treatment low.

Other possible complications – meningitis, bleeding, stroke – are extremely rare.

Other treatments

Rarely – for younger, fitter patients – a decompression of the ganglion by an open operation on the brain is an option. Patients are referred to a neurosurgeon to discuss this procedure.

If you would like further information, please contact the Pain Management Unit at Ipswich Hospital on 01473 703435.

Please ask if you need this leaflet in an alternative format.

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