Sphenopalatine ganglion stimulation for chronic cluster headaches

Information for the public
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What has NICE said?

There is evidence that this procedure works in the short-term. It has some complications, that mostly happen shortly after the implant is put in and get better by themselves. But sometimes the implant needs to be removed. This procedure should only be used if extra care is taken to explain the risks and extra steps are put in place to record and review what happens.

What does this mean for me?

Your health professional should fully explain what is involved in having this procedure and discuss the possible benefits and risks with you. In particular, they should explain the possible complications. You should also be told how to find more information about the procedure. You should only be asked if you want this procedure after having this discussion. Your health professional should ask you if details of your procedure can be collected.

Your healthcare team

A healthcare team experienced in managing chronic headaches should decide which patients should be offered this procedure.
The condition

Cluster headaches are attacks of severe pain around the eye accompanied by watering eyes and a runny nose. Attacks can happen several times a day and last from minutes to hours. The usual treatments for cluster headaches include drugs that help with symptoms (such as triptans) or that prevent and reduce the number of attacks (such as corticosteroids and nerve blocks).

If drug treatments haven't worked, surgical treatments are sometimes offered. NICE has looked at using sphenopalatine ganglion stimulation as another treatment option.

NHS Choices (www.nhs.uk) may be a good place to find out more.

The procedure

In this procedure a small device (neurostimulator) is implanted into the cheek. This is done through a small cut inside the mouth, just above the gum, with the patient under general anaesthetic. When the neurostimulator is switched on it electrically stimulates a group of nerves called the sphenopalatine ganglion, located deep in the face on either side of the nose.

The person can switch on the neurostimulator when they have a cluster headache, by placing a handheld controller on the cheek above where it is implanted. To turn the neurostimulator off, they take the controller away from the cheek. The aim is to relieve pain and reduce the number of headache attacks.

Benefits and risks

When NICE looked at the evidence, it decided that there was enough evidence to know that the procedure works in the short-term. The 3 studies that NICE looked at involved a total of 43 patients.

Generally, they showed the following benefits for some people:

- less pain during a cluster headache attack
- fewer attacks
- improved quality of life.

The studies showed that the risks of the procedure included:
- problems with the device not working properly or causing infection, that needed more surgery to correct. In some people, the device had to be removed.

- ongoing symptoms caused by the implant, that got better in some people but not in others. These included loss of sensation, pins and needles or pain around the site of the implant, headaches that weren't cluster headache attacks, and problems opening the mouth fully.

If you want to know more about the studies, see the guidance. Ask your health professional to explain anything you don't understand.

Questions to ask your health professional

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the procedure?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

About this information

NICE interventional procedures guidance advises the NHS on the safety of a procedure and how well it works.

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