Cervical Cordotomy
Patient information Leaflet
What is percutaneous cervical cordotomy?

This is a specialised pain control procedure. Pain is transmitted by nerves so it may be possible to reduce pain by blocking signals from affected nerves. It is performed to relieve pain from cancer when this pain is only on one side of the body below the collar bone. It involves interrupting pain signals travelling in the spinal cord high up in the neck on their way to the brain to reduce or stop the sensation of pain by heating up the nerve fibres to numb them.

You need to be awake throughout this procedure and you need to be able to follow instructions and talk to the doctor who is carrying out the procedure. This is so that the doctor can accurately identify the nerve fibres which carry pain sensation.

How is it done?

Cervical cordotomy is performed after you have been admitted to hospital as an inpatient. Most patients will need to stay in the hospital for three to five days. This is because the procedure itself can make people feel unwell for a day or two afterwards and it is usually necessary to reduce your painkillers to avoid drowsiness and other side effects. It is important for the doctors to know if you are on any chemotherapy or any blood thinning medications before you are admitted.

For this procedure you will lie on your back. A plastic cannula (drip) will be placed in a vein on the back of your hand and sedation will be given to relax you. You will be attached to a monitor to keep a close eye on your breathing and circulation. Your head will be placed in a special head rest, which helps prevent sudden movement of your head, so as to reduce the chances of any serious complications during the procedure.

This procedure is performed by your doctor under X ray control, which helps identify the precise location of the injection site. The injection site is just below your ear on the opposite side to the painful area. Local anaesthetic is injected into skin to numb the area. Nerve fibres carrying the pain sensation are located by passing a mild electrical current through a special needle.

Once you feel a sensation of warmth or cold in your painful area, the needle tip is electrically heated to numb these nerve fibres.

Is it Painful?

There can be some pain during this procedure, although we will help you by giving sedation and pain killers. Everybody is different and some patients find the procedure very intense and wish for the procedure to be stopped. However this is rare. It is possible to stop the procedure at any time.
**How will I feel afterwards?**

You may feel unwell for a day or two because of neck stiffness and headache. These symptoms improve day by day over 2-3 days.

**What are the risks?**

There is a very rare risk of permanent arm or leg weakness, although generally if leg or arm weakness happens, it is temporary and lasts for a few days only in our experience.

There can be weakness of bowel and bladder control, but this is rare. Sometimes after cordotomy you may find that your original pain is gone, but you have a similar pain to the original one (although usually much less severe), on the opposite side of the body (mirror image). This is called ‘mirror pain’ and we do not understand why this happens. It usually settles by itself and is usually easier to treat with pain killers than the original pain.

You may notice that your eyelid droops slightly and the pupil is small on the side of the cordotomy. It doesn’t usually cause any problems.

Very rarely death has been reported following this procedure. When this happens, it is usually due to irreversible causes and is usually a sudden loss of consciousness before the heart and breathing stops. Some people have strong views about cardiopulmonary resuscitation (CPR) and have already discussed this with their own doctors and have a Do not attempt CPR document (DNACPR) in place. It is important for us to know if you have a DNACPR document or wish to discuss the issue of CPR with us.

**How often does it work?**

In 10 % of patients the pain pathway cannot be identified and the procedure has to be abandoned.

Another 10% of patients will not get pain relief from the cordotomy but they will still have the side effects of having the procedure.

This means that 80% of patients can expect a successful result. Please ask your doctor if you have any other questions regarding this procedure.
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