PENS Therapy – Patient Information

Pain is transmitted by nerves so it is often possible to reduce pain by blocking signals from affected nerves.

What is Percutaneous Electrical Nerve Stimulation (PENS)?

PENS therapy does not destroy the affected nerves but makes them less sensitive to pain. A low voltage electrical current is delivered through a specially designed needle to the fatty layer just below the surface of the skin close to the specific nerve, or to the nerve endings situated in the local area. This stimulation is intended to induce a pain-relieving effect by altering the state of the nerves.

Why is the procedure done?

PENS therapy is used to treat chronic nerve pain including areas of hypersensitivity, headache and chronic post-surgical pain. Occasionally PENS is used as a diagnostic tool.

How is the procedure done?

The procedure is carried out whilst the patient is lying on a theatre bed, either on their back, side or front depending on the area to be treated. During the procedure, the doctor will mark the area to be treated. He will inject local anaesthetic to numb the area before inserting one or two thin probes under their skin. A grounding plate (a sticky patch) will be applied to an area of skin near to the treatment site. A very low voltage electrical current will be delivered through the probe/s for between 20 and 30 minutes.

When the treatment is complete, the probes and grounding pad will be removed and a small sterile dressing placed over the probe insertion sites for 24 hours. The patient will be allowed to go home shortly after the procedure. They can eat and drink as normal.

What are the beneficial effects?

Some patients will have total pain relief, others experience prolonged pain relief for 3 months or more and others get relief for shorter periods of time. Some may not get any benefit at all from the procedure. PENS can be repeated at intervals if you and your doctor feel this is appropriate and effective for you.

What are the side effects?

There may be some local bruising and tenderness at the probe insertion site/s. There is a very small risk of infection and nerve damage.