'PAIN PACEMAKER' FACT SHEET

Like thousands of people in the UK, Jerry Lewis has a spinal cord stimulator – what he calls a 'pain pacemaker' – to manage his chronic pain.

Following a successful trial of spinal cord stimulation, the device is implanted under the skin of the abdomen and connected to one or two insulated wires called leads. It delivers electrical pulses through the lead(s) to the spinal cord, the pain pathway. The electrical pulses block pain signals travelling to the brain along the spinal cord. Instead of pain, many patients feel a tingling sensation called paresthesia. The stimulation can be adjusted with an external remote control. Spinal cord stimulation represents a viable treatment option for pain relief when traditional treatments have failed.

Spinal cord stimulation can significantly reduce chronic pain. Although it cannot guarantee complete pain relief, the therapy has been proven to be effective in many appropriately selected and screened patients. Clinical study results show that most patients receiving spinal cord stimulation received good to excellent sustained pain relief.[1-9] Patients receiving the therapy experience an improved quality of life and are encouraged to lead more active lifestyles, with a 10 year follow-up study in Europe showing that as many as 30 per cent of patients return to work.[6]

The therapy can be tested prior to implantation of a permanent system to determine whether it will be effective for the patient's particular pain – and unlike some therapies, spinal cord stimulation can be discontinued at any time by turning off or removing the system.

As with any medical treatment, patients should talk with their doctor about complications associated with spinal cord stimulation. Implantation of the system requires surgery; therefore, surgical risks, including the risk of infection, do exist. Device complications may require additional surgery to repair or replace parts of the system. Pain or fluid accumulation at the implant site and allergic response to a system are also possible.

The most common adverse events that may be experienced with neurostimulation include: no stimulation; loss of pain relief due to lead migration; intermittent stimulation; stimulation in the wrong location; and uncomfortable stimulation. Other complications may include undesirable change in stimulation, lead migration, and loss of pain relieving effect.

In general, spinal cord stimulation is well tolerated. Unlike high doses of pain relieving drugs, spinal cord stimulation does not cause sedation, nausea, vomiting, sleep disturbance or dizziness and does not affect cognitive function. In appropriately selected patients, when analgesics are no longer effective or cause intolerable side effects, spinal cord stimulation can provide good or excellent relief from a variety of chronic pain syndromes. As a result, the therapy can enable patients to improve their quality of life and return to more active lifestyles.

References

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