

specific nerve fibres, much as dentists do, are highly effective in both acute and chronic pain.

Many other drugs, including Viagra, antibiotics, nicotine, Botox, anticonvulsants, cannabis, caffeine and chilli peppers, have also been used for different types of pain.

Antibiotics may seem an unlikely way to treat low back pain, but researchers have suggested that as

more efficient. Nasal or mouth sprays, for example, mean that the drug gets into the bloodstream and becomes effective much more quickly. Controlled release drugs ensure that adequate amounts of a painkiller are slowly released over time so there are no peaks and troughs in pain relief, and the user does not wake up in the middle of the night in pain.

Controlled release drugs ensure that adequate amounts of a painkiller are slowly released over time so there are no peaks and troughs in pain relief, and the user does not wake up in the middle of the night in pain.



Weak opioids
COX2 inhibitors
Local anaesthetics

Source: Irena Mikhlin, Nature Reviews Drug Discovery, 9, 2010

SPONSORED FEATURE

NeuroStimulator PENS therapy®: innovative technology of interest

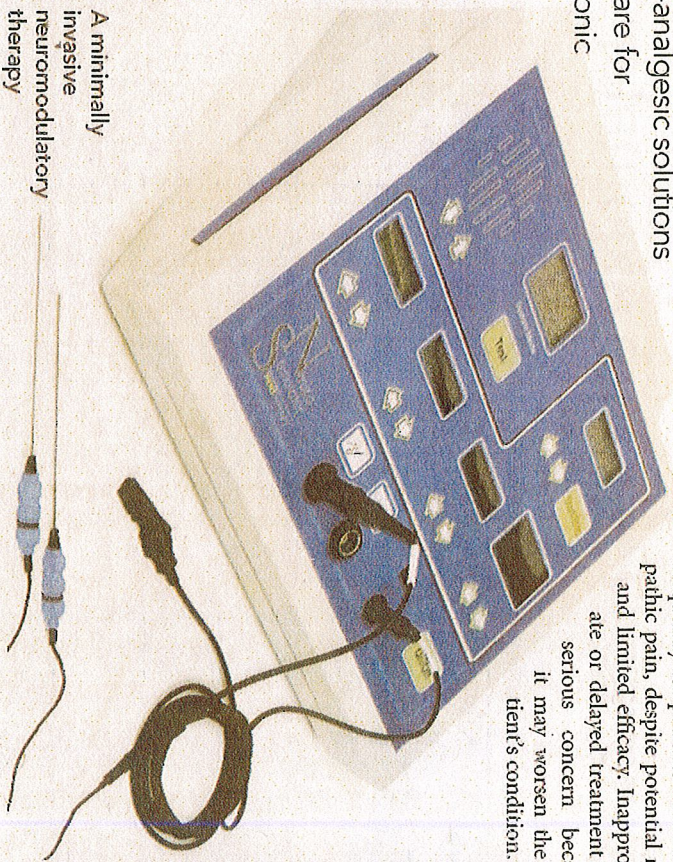
Algotec Research and Development Limited provide innovative electro-analgesic solutions to improve the quality of care for patients suffering from chronic neuropathic pain

Neuropathic pain has been proven to impair patients' overall health-related quality of life, including important aspects of physical and emotional functioning such as mobility and ability to work. It also generates substantial costs to society. It is estimated that around 7 per cent of the general population in the UK have symptoms of chronic neuropathic pain; half of which require medication and support.

Neuropathic pain is pain in which the nerve fibers have become damaged or dysfunctional. As a result, they send incorrect signals that are perceived as pain.

Conventional analgesics, such as opioids and non-steroidal anti-

inflammatory drugs are prescribed frequently for patients with neuropathic pain, despite potential risks and limited efficacy. Inappropriate or delayed treatment is a serious concern because it may worsen the patient's condition.



A minimally invasive neuromodulatory therapy

The NeuroStimulator PENS therapy® is one of Algotec's solutions for the cost-effective and less invasive management of patients suffering from neuropathic pain. PENS therapy alters the activity of peripheral nerves in order to control pain. It can be used as a means of identifying patients who might benefit from an implanted neurostimulation device. Such preliminary assessments could reduce the incidence of patients who would fail to benefit from a lengthy and costly surgical procedure, as well as substantially reducing associated surgical risks.

PENS therapy is a reversible, non-destructive and painless procedure. It is indicated for chronic peripheral neuropathic pain, including low back pain, occipital and supra-orbital headaches, post-surgical pain and post-hernia repair pain.

"Cancer patients undergoing treatment require frequent MRI scans for their follow-up and this limits the use of implantable neurostimulators for controlling their pain. PENS therapy gives us the option to do peripheral nerve / field stimulation for alleviating focal neuropathic pain, a common side effect following cancer surgery and radiotherapy; PENS therapy is minimally invasive, considerably less expensive and carries very little risk. PENS therapy is also a very useful non-pharmacological adjuvant to neuropathic pain medications and opioids. PENS is tolerated well by patients as a day-case procedure and has the potential to significantly reduce pain leading to a reduction in systemic analgesics." Dr Arun Bhasikar, consultant in Pain Medicine and Anaesthesia, The Christie NHS Foundation Trust, Manchester.

www.algotec-uk.com

