within the UK, it is important to consider ibogaine toxicity in the differential diagnosis of the acutely unwell intoxicated patient and in patients presenting with a prolonged QT interval and cardiac rhythm disturbance.

**Declaration of interest**
None declared.

I. Asua*
Oxford, UK
*E-mail: ignaciodeasua@yahoo.co.uk

### References


doi:10.1093/bja/aet396

### Sustained effect of spinal cord stimulation on pain and quality of life in painful diabetic peripheral neuropathy

Editor—Painful diabetic peripheral neuropathy (PDPN) is a common complication of diabetes mellitus (DM) and may cause physical and emotional suffering with severe impact on quality of life (QoL). Pharmacological treatment often is only partially effective or unsuccessful due to unacceptable side-effects. Spinal cord stimulation (SCS) is considered a possible treatment modality. Recently, the short- and long-term results of SCS in PDPN were reviewed, showing sufficient pain relief in 15 out of 24 patients (63%) after 1 yr. After 2.5–3 yr, the percentage of patients who experienced pain relief remained 63%, although the number of patients decreased from 24 to 19. In view of these findings, we studied the long-term effectiveness of SCS on pain and QoL in patients with PDPN. The short-term results of SCS were reported earlier in a prospective open-label cohort study. Besides the effect of SCS on pain, effect on patients’ QoL was investigated. Complications and adverse events were registered. The study protocol was approved by the local Medical Ethics Committee, and all patients gave written informed consent.

Fifteen patients [eight male, mean age 59.9 yr (range 50–72)] with PDPN in the lower limbs met the eligibility criteria. A 2 week trial stimulation with an octapolar lead (Octad lead, Medtronic, Minneapolis, MN, USA) was performed to evaluate sufficient pain relief before definitive SCS system implantation (Synergy Versitrel®, Medtronic) as described elsewhere. Eleven patients [seven male, mean age 60.9 yr (50–72)] received a definitive SCS system after positive trial stimulation. The primary outcome parameters were pain intensity, scored with a numeric rating scale, and patients’ global impression of change (PGIC) scale at 12, 24, and 36 months. Successful treatment was defined as ≥50% decrease in pain intensity at daytime and/or night-time, and/or peak pain and/or significant improvement of painful symptoms measured with the PGIC. Additionally, health-related QoL was assessed using the EuroQol-5 dimensions (EQ-5D) questionnaire.

Four patients had mild neuropathy and seven had moderate-to-severe neuropathy. The duration of DM was 18.3 (so 20.6) yr, the mean duration of neuropathy and of painful symptoms was 11.0 (so 16.0) and 5.3 (so 3.4) yr, respectively.

The group of 11 patients showed a significant pain reduction during daytime and night-time and peak pain at all time points compared with baseline, except for night-time pain after 24 months (Fig. 1). The majority of patients showed a significant

![Fig 1 Scores for daytime pain intensity and QoL during follow-up. Presented are the median (50th percentile) and the interquartile range (IQR) (25th and 75th percentile).](https://example.com/f1.png)
pain relief of ≥50% during daytime and/or night-time and/or peak pain during follow-up. After 12 months, 73% showed ≥50% pain relief, which is similar to results from earlier studies.3–5 Another long-term study reported a success rate at 24 months of 75%, compared with 55% in our study population. After 36 months, 64% of the patients in our study reported pain relief. PGIC for pain revealed improvement in pain in 73%, 27%, and 36% of the patients at 12, 24, and 36 months, respectively. Overall success rates of SCS on pain relief were 91% at 12 months, 55% at 24 months, and 64% at 36 months.

An improvement in QoL was seen in 64% of the patients at 12 months, 55% at 24 months, and 64% at 36 months. The baseline values of the EQ-5D utility scores [median 0.35 (interquartile range: 0.06–0.68)] (Fig. 1) were lower than previously described in PDPN and lower compared with two general population-based samples in the USA with mean utility scores of 0.871 and 0.91.12

In two patients, a new pulse generator was implanted during the follow-up period. Owing to loss of benefit of SCS in two other patients, the SCS system was removed 29 and 34 months after implantation, respectively. No serious adverse events, infections, or wound breakdown occurred during the study.

In conclusion, a sustained effect of SCS on pain and QoL is noted in PDPN patients. This makes SCS an acceptable treatment modality for those patients who do not respond to conventional medical treatment.

Acknowledgements

The authors would like to acknowledge the patients who participated in the study. Furthermore, we would like to thank M.N. Janssen, MD, for performing SCS system implantation and the members, especially Dr E.A. Joosten, of the multidisciplinary steering committee for their scientific expertise.

R. Slangen*
W. A. Pluijms
C. G. Faber
C. D. Dirksen
A. G. H. Kessels
M. van Kleef
Maastricht, The Netherlands
*E-mail: rachel.slangen@mumc.nl

Declaration of interest

None declared.

Funding

This work was supported by a grant from Medtronic for the employment of one researcher for 3 yr. Medtronic was not involved in the analysis and interpretation of the data. This study was guided by a multidisciplinary steering committee.


12 Johnson JA, Pickard AS. Comparison of the EQ-5D and SF-12 health surveys in a general population survey in Alberta, Canada. Med Care 2000; 38: 115–21

doi:10.1093/bja/aet397

Early surgical reintervention for haemostasis after breast surgery using persistent sensory block of a paravertebral block

Editor—The use of analgesic thoracic paravertebral block (PVB) for breast cancer surgery is well established. We report a case with a sensory block that persisted long enough for an emergency reintervention. The patient gave approval to publish her case.

A 60-yr-old female patient was undergoing surgery on a breast carcinoma. An elective breast tumour resection with radioisotope-guided sentinel lymph node biopsy under general anaesthesia associated with analgesic PVB was planned. Her medical history had no bleeding reported. The blood tests did not find any preoperative thrombocytopenia or abnormal haemostasis (PT 100%, aPTT 30 s). The PVB was performed on the conscious patient in the left lateral decubitus position at the T3–4 thoracic space right level just before induction of general anaesthesia. After skin disinfection and the use of sterile gloves, an injection of 20 ml ropivacaine (7.5 mg ml−1) (Ropivacaine Kabi®, Fresenius Kabi, Sevres, France) was given via a 22 G × 80 mm needle (SonoTAP cannula, Laboratoire Gamida Pajunk, Geisingen, Germany). The needle was inserted