

PNS AND CHRONIC PAIN IN PERIPHERAL NERVE LESIONS

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INTRODUCTION

In a small group of carefully selected patients with chronic neuropathic pain due to peripheral nerve lesion, a valid option is constituted by peripheral nerve stimulation (PNS) delivered via electrodes surgically implanted adjacent to the nerve.

MATERIAL AND METHOD

We have treated 51 patients with PNS for chronic intractable pain due to lesion of the peripheral nerves. Our criteria for the selection were: pain primarily involving one peripheral nerve, failure of other treatments, surgically unsolvable lesion. The best indication for PNS is pain in the distribution of one major nerve also if pain is subsequently spread to other areas of the body. The lesions were post traumatic in 26 cases, RSD in 5, neuralgia in 18 and neuritis in 2. In all cases a local anesthetic block was performed in the preoperative trial and the electrode was implanted directly under the nerve or by percutaneous technique. We had 6 complications: displacement in 4 cases, skin ulceration in 2 and disconnection in 1; all required a second surgical operation.

RESULTS

At the follow up ranging from 6 to 60 months (median 34) we observed a complete relief of pain in 37 patients, by complete relief we mean a 50% or more reduction in pain intensity or duration estimated with the pain rating scale in a period ranging from 4 to 8 weeks and no other treatment (physical or drug) required; in 14 only a minimal reduction of pain was detected; in particular the incomplete relief of pain was observed in the sciatic nerve for all kinds of lesions.

CONCLUSIONS

For unsuccessful patients with chronic neuropathic pain due to peripheral nerve lesions, PNS can be considered as the choise treatment for carefully selected patients.