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Pulsed radiofrequency in lumbar canal stenosis

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Abstract

INTRODUCTION

The efficacy of pulsed radiofrequency was evaluated in patients with chronic lumbar radicular pain due to spinal canal stenosis with varying clinical distribution to the lower limbs. Patients who did not respond to at least two ultrasound-guided steroid infiltrations, first periradicular and then caudal epidural, were enrolled.

METHODS

30 patients with chronic radicular pain in one or both lower limbs were recruited. Some had undergone surgery, others had not. Subjected first to ultrasound-guided periradicular and then caudal epidural infiltration, they had no reduction in pain. With ultrasound guidance, an electrode needle was positioned in the epidural space passing through the sacral hiatus and pulsed radiofrequency was administered with the following parameters: 5 ms, 5 Hz, 55 volts, 600 sec. Outcomes were assessed by NRS scores before treatment and 3 months later. A 50% pain reduction was considered satisfactory.

RESULTS

A statistical study was not performed, only a qualitative evaluation of the case series. After the pulsed radiofrequency procedure the NRS values were reduced, compared to those before the procedure in 25 patients, 5 patients did not observe benefits.

CONCLUSIONS

Although 5 patients had no benefits, the results are encouraging because 25 patients reported a reduction in pain that had not occurred with steroid infiltrations.

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