Effectiveness of repeated radiofrequency neurotomy for lumbar facet pain.

Schofferman J, Kine G.

Abstract

STUDY DESIGN: Retrospective chart review.

OBJECTIVES: To determine the success rate and duration of relief of repeat radiofrequency neurotomy for lumbar facet joint pain.

SUMMARY OF BACKGROUND DATA: Radiofrequency neurotomy is an effective but temporary management of lumbar facet pain. When pain recurs, radiofrequency neurotomy is usually repeated, but the outcome and duration of relief for repeat radiofrequency neurotomies are unknown.

METHODS: Record review of consecutive patients who had an initial successful radiofrequency neurotomy, subsequent recurrence of pain, and then repeat radiofrequency neurotomy. Responses of repeat radiofrequency neurotomies were compared with initial radiofrequency neurotomy for success rates and duration of relief.

RESULTS: There were 16 women and 4 men. Mean age was 48 years (range, 26-63). Radiofrequency neurotomy denervated one segment in two patients, two segments in 16 patients, and three or more in two patients. There were 10 bilateral and 10 unilateral radiofrequency neurotomies. Mean duration of relief after initial radiofrequency neurotomy was 10.5 months (range, 4-19). To date, two patients had a series of two radiofrequency neurotomies performed, six had three, five had four, three had five, and four had seven or more. Twenty patients had a second radiofrequency neurotomy, which was successful in 17 (85%) but unsuccessful in two. The mean duration of relief in 16 of these 17 patients was 11.6 months (range, 6-19), and relief is continuing in one. Sixteen patients had a third radiofrequency neurotomy, of which 15 were successful and one was unsuccessful. The mean duration of relief in nine of the 15 was 11.2 months (range, 5-23), and relief is continuing in the other six. Eight patients had a fourth radiofrequency neurotomy, which was successful in seven but unsuccessful in one. The mean duration of relief was 9 months (range, 5-14) in three patients, and relief is continuing in the other four. None of these differences is significant. The frequency of success and durations of relief remained consistent after each subsequent radiofrequency neurotomy.

CONCLUSIONS: Repeated radiofrequency neurotomies are an effective long-term palliative management of lumbar facet pain. Each radiofrequency neurotomy had a mean duration of relief of 10.5 months and was successful more than 85% of the time.

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