

Long-term results radiofrequency ablation Morton's neuroma. Treatment of pain recurrence.

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Morton's neuroma is a very common cause of metatarsalgia. Recurrence of pain syndrome after surgical treatment of Morton's neuroma occurs in 10-50% of cases. The purpose of this study was to investigate the effectiveness of radiofrequency ablation (RFA) in patients with chronic pain refractory to conservative therapy, evaluation of the effectiveness of second radiofrequency ablation (RFA) in these cases.

Materials and methods.

166 patients were studied. Continuous RFA was performed under ultrasound guidance and electrophysiological control by using one or more of 90 seconds cycle and with maintenance of the probe tip a temperature of 90 °C (130 cases in group 1). The patients of the control group underwent surgical excision of the neuroma (36 cases in group 2). We followed patients for a more than 12 months to assess their change in visual analogue pain scores (VAS), PainDETECT scores, symptom improvement, complications.

Results.

Reduction of pain intensity was achieved after RFA from 8[8;9] to 1[0;3] VAS score and from 16[12;19] to 5[3;9] PainDETECT score. Reduction of pain intensity was achieved after surgical excision of the neuroma from 8[7;9] to 2,5[1;4,5] VAS score and from 12,5[11,0;16,0] to 8,5[6,0;11,0] PainDETECT score. Duration of hospital treatment was 1,0[1,0;2,0] day in group 1 and 5,0[4,0;6,5] day in group 2. The number of complications in the postoperative period: two cases (1,5%) in the main group and five cases (13,9%) in the control group. Positive outcome of treatment in patients of group 1 was observed in 109 cases (83,9%), unsatisfactory – in 21 cases (16,2%). Positive outcome of treatment in patients of group 2 was

observed in 27 cases (75.0%), unsatisfactory – in 9 cases (25.0%). 9 patients from group 1 and 2 patients from group 2 underwent second RFA of neuroma.

After second RFA, in group 1 reduction of pain intensity was achieved from 8[7;9] to 1[1;2] VAS score and from 14[12;16] to 7[4;8] PainDETECT score. In group 2 reduction of pain intensity was achieved from 9,5[9;10] to 3[1;5] VAS score and from 20,5[18;23] to 9[7;11] PainDETECT score. An unsatisfactory result was observed in one case (9,1%) from group 2

Conclusion.

Radiofrequency ablation is a safe and effective, minimally invasive technique for the treatment of Morton's neuroma. also for the treatment recurrence of pain syndrome after neurosurgical treatment of Morton's neuroma