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THE EFFECTIVENESS OF BOTULINUM TOXIN TYPE A IN THE TREATMENT OF NEUROPATHY OF THE INFERIOR ALVEOLAR NERVE AFTER DENTAL SURGERY

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ABSTRACT

Neuropathy of the inferior alveolar nerve in recent years is one of the most common complications after dental interventions, accompanied by severe pain and sensitivity disorders. Clinically, iatrogenic neuropathy of the trigeminal nerve is represented, as a rule, by the presence of constant aching, burning or dull pain in the area of innervation of the affected nerve, against which neuralgic paroxysms occur with irradiation of pain, respectively, to the segmental areas of the face. The autonomic nervous system is often involved in the process. Unfortunately, at present there is no uniform treatment protocol for this pathology. As is known, botulinum toxin type A has a direct effect on pain afferents and an analgesic effect when administered locally into areas of sensitivity disorder.

The aim of study to analyze the effectiveness of treatment methods for patients with iatrogenic neuropathy of the inferior alveolar nerve after surgical intervention using botulinum toxin type A.

70 patients took part in the study. For a comparative assessment of the effectiveness of treatment, they were divided into two groups: group 1 – patients who received conservative drug treatment; group 2 - conservative drug treatment in combination with botulinum therapy. Dynamic observation and evaluation of the effectiveness of treatment were carried out before the start of treatment, after 3 and 6 months.

A comparative analysis of the effectiveness showed that the method of complex therapy using injections of botulinum toxin type A in group 2 demonstrated more pronounced positive dynamics than in patients of group 1.

The results of our studies confirmed that botulinum therapy is a modern clinically proven method for relieving pain and sensory disorders in neuropathy.

KEYWORDS: neuropathy of the inferior alveolar nerve, dental pain, electroneuromyography, botulinum toxin type A, facial pain, complication.

INTRODUCTION

Neuropathy of the inferior alveolar nerve (IAN) often occurs as a result of dental surgery, most often

due to extraction of impacted and dystopic teeth and implantation in the lower jaw [Akopyan G.V., Mat-

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