The epifacial electric stimulation of the occipital nerve in cases of therapy-resistant neuralgia of the occipital nerve.

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Abstract

BACKGROUND: The term "neuralgia of the occipital nerve" in clinical work includes different kinds of pain in the occipital region. Correctly, this diagnosis should be reserved for such pain syndromes which, corresponding to the definition of neuralgia, are due to damage of the cervical roots C1-C3 or of the major occipital nerve arising from those roots. We introduce an operative method to treat chronic therapy-resistant headaches in the area of the major and minor occipital nerve. The courses of three of the first patients operated in our hospital are described.

METHODS: An electrode with four poles is positioned epifacially in the area of the affected nerve in local anaesthesia. In cooperation with the patient the correct position of the electrode and the right poling have to be found. Afterwards, the electrode is externalized after subcutaneous tunneling. For several weeks, the patients stimulate while being at home. If they report about a satisfactory reduction of pain, a subcutaneous receiver for use with an external stimulator is implanted.

RESULTS: Most of the patients who received an electrode had a satisfying reduction of pain of 50-100% during the testing period so that the receiver was implanted. We had no success in two patients whose occipital nerves were destroyed by previous operations so that the system was explanted.

CONCLUSIONS: The epifacial stimulation of the occipital nerve is an effective method to treat neuralgia of this nerve. Patients with destruction of the nerve have to be excluded, because in their cases the stimulation does not work.

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