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# [Bilateral occipital nerve stimulation for the treatment of chronic cluster headache: case series and initiation of a prospective study].

[Article in German]

<u>Müller OM, Gaul C, Katsarava Z, Sure U, Diener HC, Gasser T.</u> **Source** 

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## **Abstract**

#### **BACKGROUND:**

The chronic cluster headache (CCH) is a disabling disorder for every patient. Treatment is a challenging situation for the physician. Some patients will not experience adequate resolution of their cluster attacks by medication and the prophylaxis does not reduce the attacks sufficiently. Therefore, other treatment options have to be found.

# **METHODS:**

Since December 2008 seven patients with CCH have been treated by bilateral occipital nerve stimulation (ONS) at the University Hospital Essen. Implantation of the electrodes and stimulation paradigms were standardised. The maximum follow-up to date is 12 months.

# RESULTS:

ONS was successfully employed in all patients. The intensity of the attacks decreased by 50 %. The consumption of attack medication was reduced by 77 % on average. Some patients could reduce their medication prophylaxis. A tendency towards improved quality of life was seen in all patients by means of a standardised questionnaire (SF-36). One generator had to be exchanged due to infection. Scar formations required reoperation and adhesiolysis of the thoracic connector in another patient. 6 out of 7 patients would fully recommend the operation.

## **CONCLUSION:**

Bilateral ONS is a promising treatment for CCH, with a low risk profile in our experience. Further studies have to be conducted to clarify the mechanism of the stimulation and optimal parameters of ONS. For this particular reason, patients with CCH have been included in a prospective study since October 2009.

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