Cluster headache treatment procedures in Spain

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Navarro-Fernández et al. from Madrid described in 2019 the progressive changes of chronic cluster headaches (CHs) in a patient who is being treated by a multimodal approach, using pharmacology, neurostimulation and physiotherapy.

A male patient, 42 years of age was diagnosed with left-sided refractory chronic CH by a neurologist in November 2009. In June 2014, the patient underwent a surgical intervention in which a bilateral occipital nerve neurostimulator was implanted as a treatment for headache.

Primary findings included a decreased frequency of CH which lasted up to 2 months and sometimes even without pain. Besides this, there were decreased levels of anxiety, helplessness (PCS subscale) and a decreased impact of headache (HIT-6 scale). Bilateral pressure pain thresholds (PPTs) were improved along with an increase in strength and motor control of the neck muscles. These improvements were present at the conclusion of the treatment and maintained up to 4 months after the treatment.

A multimodal approach, including pharmacology, neurostimulation, and physiotherapy may be beneficial for patients with chronic CHs. Further studies such as case series and clinical trials are needed to confirm these results. ¹⁾.

Salgado-López et al. published in 2019 a prospective analysis of 37 patients with refractory cluster headache (CCHr) who underwent radiofrequency ablation (RFA) or pulsed radiofrequency (PRF) of the sphenopalatine ganglion (SPG) in the Department of Neurosurgery, University Hospital de la Santa Creu i Sant Pau, Barcelona between 2004 and 2015.

The mean age of the patients was 40 years (range, 26-59 years). PRF was performed in 24 patients, and RFA was performed in 13 patients. A total of 5 patients (13.5%) experienced complete clinical relief of both pain and parasympathetic symptoms, 21 patients (56.8%) had partial and transient relief, and 11 patients (29.7%) did not improve. There was no evidence of significant superiority of one radiofrequency modality over the other (P = 0.48). There were no complications associated with the technique. The passage of time tended to decrease the efficacy of both techniques (P < 0.001). The mean follow-up was 68.1 months (range, 15-148 months). To our knowledge, this is the series with the largest number of patients and the longest follow-up period published in the literature.

Radiofrequency of the SPG was a safe, fast, and partially effective method for the treatment of CCHr. Given its low rate of complications and its low economic cost, we think it should be one of the first invasive treatment options, prior to techniques with greater morbidity and mortality, such as neuromodulation²⁾.

The Headache Study Group of the Spanish Society of Neurology (GECSEN) designed a selfadministered cross-sectional survey and sent it to all group members through the SEN's scientific area web platform in February 2016. The objective was to ascertain the main technical and formal aspects of this procedure and compare them with data obtained in a similar survey conducted in 2012.

A total of 39 neurologists (mean age 41.74 years; SD: 9.73), 23 men (43.7 years; SD: 9.92) and 16 women (38.94 years; SD: 9.01) participated in this survey. Of these respondents, 76.9% used anaesthetic block in their clinical practice (79.16% in a tertiary-care hospital). The main indications were diagnosis and treatment of neuralgia (100%), prevention of chronic migraine (61.7%), episodic cluster headache (51.3%), and chronic cluster headache (66.7%). AB was used by 31% of the respondents to block only the lateral occipital complex, 13% also infiltrated the supraorbital nerve, and another 13% infiltrated the auriculotemporal nerve as well.

The indications for anaesthetic blocks and the territories most frequently infiltrated are similar to those cited in the earlier survey. However, we observed increased participation in this latest survey and a higher percentage of young neurologists (35.89% aged 35 or younger), indicating that use of this technique has entered mainstream clinical practice ³.

Láinez and Marti from Valencia after obtaining good results in a small number of patients, a miniaturized stimulator was developed. Stimulation of the sphenopalatine ganglion with this device proved to be efficacious in acute and preventive treatment in a clinical trial involving patients with chronic refractory cluster headache. Implantation of the device is minimally invasive and the most frequent side-effects are mild, such as paraesthesia and pain over the maxillary area. In patients who have used the SPG device for longer than one year, the therapeutic effect remains effective and the side-effects decrease. Conclusions The reported studies have demonstrated that SPG stimulation is a safe and effective treatment for chronic cluster headache. Long-term studies have shown that the effect remains over time and this treatment could be a good choice in patients with chronic refractory headache. We need more data about its potential use in other forms of headache, such as other trigemino-autonomic headaches or migraine.⁴⁾

References

1)

Navarro-Fernández G, de-la-Puente-Ranea L, Gandía-González M, Gil-Martínez A. Endogenous Neurostimulation and Physiotherapy in Cluster Headache: A Clinical Case. Brain Sci. 2019 Mar 12;9(3). pii: E60. doi: 10.3390/brainsci9030060. PubMed PMID: 30870974; PubMed Central PMCID: PMC6468612.

2)

Salgado-López L, de Quintana-Schmidt C, Belvis Nieto R, Roig Arnall C, Rodríguez Rodriguez R, Álvarez Holzapfel MJ, Molet-Teixidó J. Efficacy of Sphenopalatine Ganglion Radiofrequency in Refractory Chronic Cluster Headache. World Neurosurg. 2019 Feb;122:e262-e269. doi: 10.1016/j.wneu.2018.10.007. Epub 2018 Oct 11. PubMed PMID: 30315985.

Santos Lasaosa S, Gago Veiga A, Guerrero Peral ÁL, Viguera Romero J, Pozo-Rosich P. Patterns of anaesthetic pericranial nerve block in headache patients. Neurologia. 2018 Apr;33(3):160-164. doi:

10.1016/j.nrl.2016.05.016. Epub 2016 Jul 25. English, Spanish. PubMed PMID: 27461182.

Láinez MJ, Marti AS. Sphenopalatine ganglion stimulation in cluster headache and other types of headache. Cephalalgia. 2016 Oct;36(12):1149-1155. doi: 10.1177/0333102416644968. Epub 2016 Jul 11. Review. PubMed PMID: 27152017.

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