## Sphenopalatine ganglion radiofrequency

see also Sphenopalatine ganglion stimulation.

Salgado-López et al. conducted a prospective analysis of 37 patients with chronic refractory cluster headache (CCHr) who underwent radiofrequency ablation (RFA) or pulsed radiofrequency (PRF) of the Sphenopalatine ganglion (SPG) in the University Hospital de la Santa Creu i Sant Pau between 2004-2015.

N=37 patients. The mean age was 40 years (range=26-59 years). PRF was performed in 24 patients and RFA 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, while 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 the best of the author's knowledge this is the series with a largest number of patients and a longest follow-up period published in the literature up to the present moment.

Radiofrequency of the SPG is a safe, fast and partially effective method for the treatment of CCHr. Given its low rate of complications, as well as its low economic cost, we consider it should be one of the first invasive treatment options, prior to techniques with greater morbidity and mortality, such as neuromodulation <sup>1)</sup>.

A study was conducted to evaluate the efficacy, based on 12- to 70-month follow-up data, of radiofrequency (RF) lesions of the sphenopalatine ganglion made in patients suffering from cluster headache. Sixty-six patients suffering from either episodic (Group A, 56 patients) or chronic (Group B, 10 patients) cluster headache who were not responsive to pharmacological management were treated by RF lesioning in the sphenopalatine ganglion. Complete relief of pain was achieved in 34 (60.7%) of 56 patients in Group A and in three (30%) of 10 patients in Group B. No relief was found in eight patients (14.3%) in Group A and in four (40%) in Group B. The mean time of follow up was 29.1 +/- 10.6 months in Group A and 24 +/- 9.7 months in Group B, ranging from 12 to 70 months. With regard to side effects and complications, temporary postoperative epistaxis was observed in eight patients and a cheek hematoma in 11 patients; a partial RF lesion of the maxillary nerve was inadvertently made in four patients. Nine patients complained of hypesthesia of the palate, which disappeared in all cases within 3 months. The authors conclude that RF lesioning in the sphenopalatine ganglion via the infrazygomatic approach may be performed in patients suffering from cluster headache that does not respond to pharmacological therapy.<sup>21</sup>.

1)

Salgado-López L, de Quintana-Schmidt C, Nieto RB, Arnall CR, Rodriguez RR, Álvarez Holzapfel MJ, Molet-Teixidó J. Title: Efficacy of the sphenopalatine ganglion radiofrequency in refractory chronic cluster headache. World Neurosurg. 2018 Oct 10. pii: S1878-8750(18)32299-X. doi: 10.1016/j.wneu.2018.10.007. [Epub ahead of print] PubMed PMID: 30315985.

Sanders M, Zuurmond WWA. Efficacy of Sphenopalatine Ganglion Blockade in 66 Patients Suffering

Last update: 2024/06/07 sphenopalatine\_ganglion\_radiofrequency https://neurosurgerywiki.com/wiki/doku.php?id=sphenopalatine\_ganglion\_radiofrequency 02:52

from Cluster Headache: A 12- to 70- Month Follow-Up Evaluation. J Neurosurg. 1997; 87:876-880

From: https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki** 

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=sphenopalatine\_ganglion\_radiofrequency



