**F8****Efficacy and Safety of Occipital Nerve Stimulation for Treatment of Chronic Cluster Headache**Láinez M.J.A.<sup>1</sup>; Piera A.<sup>1</sup>; Salvador A.<sup>1</sup>; Roldán P.<sup>2</sup>; González-Darder J.<sup>2</sup><sup>1</sup>Department of Neurology, Hospital Clínico Universitario, Valencia, Spain; <sup>2</sup>Department of Neurosurgery, Hospital Clínico Universitario, Valencia, Spain

**Objectives:** To investigate the efficacy and tolerability of Bilateral Occipital Nerve Stimulation (BONS) in five patients with intractable chronic cluster headache during 24 months of follow-up.

**Background:** Patients with cluster headache experience periods with several attacks of a severe headache. In chronic cluster headache, patients have a break between bouts of no more than a month every 12 months, unless treatment is given. These patients need to take preventive medication every day for years, with up to three types of medication which is not effective. BONS could provide a good and safety treatment strategy for patients with an intractable chronic cluster headache.

**Methods:** Five patients aged between 24 to 51 years underwent BONS consisting of electrodes, leads and a battery with an external generator that could be used to control the degree of stimulation with an intensity parameter. They were asked to record details of frequency, intensity and symptomatic treatment for their attacks in a diary before and after continuous BONS.

**Results:** Although the response to treatment took place over weeks to months, 3 patients obtained an excellent response immediately with an absence of attacks along 24 months of follow-up; 1 patient obtained a partial response, achieving an acceptable control of symptoms with combined treatment with preventive oral therapy and the last patient experienced a good response initially but the pain changed of side in one month and was necessary to stop stimulation. BONS was not associated with any adverse event.

**Conclusions:** BONS therapy is a safe and useful technique, and could be an effective treatment in patients with a chronic refractory headache. Although our period of follow up at this moment reach 32 months, we are not capable to predict the length of that effect in a long term follow-up; however, neurostimulation seems a reasonable option in this patients.

**F9****Sphenopalatine Ganglion Radiofrequency Ablation for the Management of Chronic Cluster Headache**Narouze S.N.<sup>1</sup>; Casanova J.<sup>2</sup>; Kapural L.<sup>1</sup><sup>1</sup>Pain Management Department, Cleveland Clinic, Cleveland, OH, USA; <sup>2</sup>Neurology Department, Neurocare Center, Canton, OH, USA

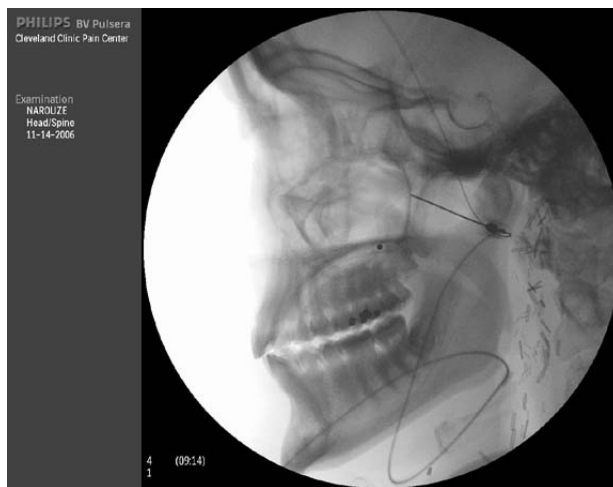
**Objectives:** Chronic cluster headache patients are often resistant to pharmacological management.

We were interested to examine the effect of percutaneous radiofrequency ablation of the SPG in those patients.

**Background:** The SPG is involved in the pathophysiology of cluster headache. Percutaneous radiofrequency ablation of the SPG was used as a treatment of sphenopalatine neuralgia, and SPG block was shown to improve episodic cluster headache but not chronic cluster headache.

**Methods:** After the institutional research review board's approval, the data were collected retrospectively by reviewing patients' medical records.

15 patients with chronic cluster headache were identified. Those patients experienced good, however temporary relief after SPG block and subsequently they underwent percutaneous radiofrequency ablation of the SPG.



The data collected include: demographic variables; onset and duration of the headache; mean attack intensity (MAI), mean attack frequency (MAF), and pain disability index (PDI) before the procedure and at 1,3,6,12,18 months afterwards. Changes in