Sphenopalatine syndrome and trigeminal neuralgia after medullary-bulb union tumor surgery. Lessons from case report

Revuelta M. MD, PhD, EDPM; Parrilla L. MD; Díaz R. MD; Català E. MD, PhD
Pain Unit. Anesthesiology Department
University Hospital of Santa Creu i Sant Pau. Barcelona . Spain.

BACKGROUND AND AIM

Sphenopalatine ganglion (SPG) is an extracranial parasympathetic ganglion that provides innervation to lacrimal glands, nasal mucosa, soft paladar, tonsils, uvula, buccal cavity mucosa, upper lip and gums and upper part of the pharynx. SPG establishes very closed relations with the maxillary nerve, facial nerve and cervical sympathetic chain.

Sphenopalatine syndrome is uncommon and could appear masked in facial pain, so its diagnostic is a challenge

We discuss a case report where, after medullary-bulb union tumor surgery, appeared a complex facial pain.

CASE REPORT

The patient , a man of 60 years old, came to Pain Unit four years later after medullary-bulb union hemagioblastom surgery. He describes burn sensation from preauricular and suborbital area towards wins nose with erythema, scabs and signs of bleeding in nasal mucosa associated with runny nose and tearing.

Also he described trigeminal symptoms in first and second branch area in treatment with pregabalin 75 mg/12h. We added amitriptyline 10 mg/d with better pain control. MRI (2016) saw post surgery changes and no tumor.

All symptoms concerning nasal area and tearing disappeared for three months after trans nasal instillation of topic gel Lidocaine 2% (3 ml) plus Triamcinolone 40 mg with Allevio^R catheter.

The nasal symptoms reappeared in lower intensity.

Patient was proposed to pulse radiofrequency of SPG which was effective following one year.

DISCUSION

Trigeminal neuralgia and the sphenopalatine syndrome could coexist because of the anatomic relationship between them.

Symptoms from Sphenopalatine syndrome appear unilaterally without the typical presentation in cluster. It must be differentiated from autonomic trigeminal headaches (HD) especially Cluster HD, so the differential diagnosis is crucial.

1.1 Idiopathic sphenopalatine neuralgia

- A. The symptoms and signs of the involved sphenopalatine ganglion fulfilling criteria B–F
- B. Pain starting at the root of the nose, orbital region, maxillary region, teeth, and frontotemporal region, may radiate to the posterior mastoid process and neck. And have the following features:
 - 1) Unilaterality of head pain, without side shifts
 - 2) Severe or very severe intensity
 - 3) Episodes of varying duration, or persistent pain
- C. Headache ipsilateral autonomic activity symptoms or signs, at least one of the following
 - 1) Lacrimation and/or conjunctival injection
 - 2) Nasal congestion and/or rhinorrhoea
- D. The course of disease is episodic or continuous with no cluster pattern
- E. Poor or limited treatment response to oxygen or indomethacin
- F. Not better accounted for by another ICHD-3 diagnosis

1.2 Secondary sphenopalatine neuralgia

- A. Headache fulfilling criteria for 1.1 sphenopalatine neuralgia
- B. Clinical, laboratory, and/or imaging evidence of a disorder or lesion within the structure surrounding the sphenopalatine ganglion
- C. Pain resolves after successful treatment of the causative disorder or lesion

CONCLUSION

Sphenopalatine syndrome could be an independent entity. Anamnesis and explorations and diagnostic block are important procedures for a posterior management