

Glossopharyngeal Neuralgia: Case Report

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Abstract

Glossopharyngeal neuralgia (GPN) is an unusual cause of facial pain, corresponding to approximately 0.2-1.3%. Patients usually presents with facial pain associated with daily life activities (cough, swallow) and in severe cases with syncop. Epidemiology of the pathology demonstrates controversy about the predominance of the male, being consensus from patients over 50 years. We present a case report of a 51 patient diagnosed and treats for this rare disease with good outcome.

Keywords: Glossopharyngeal neuralgia; Pain; Headache

Abbreviations: GPN: Glossopharyngeal Neuralgia; GKS: Gamma Knife Surgery; MRI: Magnetic Ressonance Imaging; CT: Computarized Tomography

Introduction

Glossopharyngeal neuralgia (GPN) is an unusual cause of facial pain, corresponding to approximately 0.2-1.3% of patients with facial pain [1]. The first clinical description was assigned to weisenberg 1910 [2]. The practice of patients is usually sudden affecting the glossopharyngeal nerve path, characterized by pain triggered by swallowing, chewing, coughing, talking, and may or not be associated with syncop frames/ cardiorespiratory stop in rare cases [3,4]. The clinical or surgical treatment options may include the use of anticonvulsants and in severe or selected cases neurovascular decompression or Gamma Knife surgery [5-8].

Case Report

51-year-old male with pain in shock of sudden onset is 8 months of pain in neck region with irradiation to the region of hemiface right to Franca worsens when swallowing and chewing. Sick said several paroxysms, having 1 frequency crisis every 3 days. After investigation in another service with trigeminal neuralgia, chance of requested the evaluation team. In the first assessment the patient was in use of Gabapentin 900 mg/d with inadequate control of paroxysms. Neurological examination: alert and oriented gear without changes and without strength deficits and/or sensitivity of note the same featured pain swallowing and spontaneous cough. Right Gag Reflex abolished without deviation of the uvula. Magnetic resonance imaging illustrated a great right neurovascular conflict between posteroinferior Cerebellar artery with glossopharyngeal nerve (Figures 1 and 2).

The patient underwent a retrossigmoid craniotomy and neurovascular decompression of glossopharyngeal nerve, having in the first post-operative presented fully symptomatic improvement, having received high in the 4th post-operative without complaints and medications until 1st year outpatient follow up.

Discussion

Glossopharyngeal neuralgia (GPN) is an unusual cause of facial pain, corresponding to approximately 0.2-1.3% of patients with facial pain or a hundred times less frequent when compared with trigeminal neuralgia [1].

The first description of the clinic was assigned to Weisenberg 1910 in a patient with pontocerebelar angle tumor diagnosis and Harris in 1926 the name of glossopharyngeal neuralgia [2,9]



Figure 1(A): MRI T2seq. FIESTA: Right vascular compression/Conflict.

The etiology of trigeminal neuralgia in most cases is primary/ idiopathic or secondary to neurovascular compression (posteroinferior Cerebellar arteries or branches of verteral arteries), skull base tumors or cerebellar point angle tumors [10]. Epidemiology of the pathology demonstrates controversy about the predominance of the male, being consensus from patients over 50 years [10].

The clinic of patients is usually sudden affecting the glossopharyngeal nerve path, characterized by pain (unilateral electric shock type, abrupt, and located in the ear, at the base of the tongue, tonsillar fossa, or under the angle of the mandible) triggered by swallowing, chewing, coughing, talking, and may or not be associated with sincopais frames/ cardiorespiratory stop in rare cases [3,4]

The investigation of patients with neuralgia includes realization of head CT and/or Brain MRI in order to highlight tumors or vascular

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Figure 2: Positioning: Horizontal decubit with cephalic rotation.



Figure 3: Retrosigmoid craniectomy.



Figure 4: Cerebellum in dural opening aspect.



Figure 5: Relationship of the posteroinferior Cerebellar with. Glossopharyngeal nerve (arrow).

compressions as etiology [11,12].

The Clinical treatment includes the use of Anticonvulsants (e.g. Carbamazepine, Oxcarbazepine, Phenytoin) in doses appropriate for symptomatic control and

The surgical treatment (neurovascular decompression) has proved higher results when compared with clinical management, despite all known complications associated with the procedure [5,6,12]

Recently, Xiong NX,2015 reported good results in 3 patients with intractable pain for GPN using Gamma Knife Surgery (GKS) [8].

The option of positioning (horizontal dorsal cephalic rotation decubito) craniotomy and retrossigmoid chosen by the team was the infratentorial side by supracerebelar allow proper exposure and when associated with 15-20° tilt the surgical table allows a wider exposure of the pontocebelar angle elements without the use of retractors, thus decreasing the chance of Cerebellar lesion by mixing pad (Figures 3-5) [7].

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