Glossopharyngeal neuralgia

Glossopharyngeal nerve neuralgia are recurring attacks of severe pain in the back of the throat, the area near the tonsils, the back of the tongue, part of the ear, and/or the area under the back of the jaw. The pain is due to malfunction of the 9th cranial nerve (glossopharyngeal nerve)

Epidemiology

Glossopharyngeal neuralgia (GPN) (a.k.a. vagoglossopharyngeal neuralgia) is a rare condition, with an estimated incidence of 0.8 cases per 100,000 persons per year [1].

Predilection among females, principally within the fifth decade of life [2].

Corresponds to 0.2-1.3% of all facial pain syndromes [3].

GPN occurs more frequently on the left side and involvement is bilateral (not simultaneously) in only 2% of the cases [4].

Classification

The GPN can be classified by the clinical features, including the classic GPN (episodic pain) and the symptomatic GPN (continuous pain), and the second is classified by the etiology, including an idiopathic origin or a secondary nature (e.g., tumor, neurovascular compression) [5].

Recurrent glossopharyngeal neuralgia

Etiology

The cause is often unknown but sometimes is an abnormally positioned artery that puts pressure on (compresses) the glossopharyngeal nerve, where the nerve exits the brain stem.

Clinical features

Glossopharyngeal neuralgia clinical features.

Diagnosis

The diagnosis of GPN is primarily clinical, and complimentary imaging can be performed, including

computed tomography (CT) or magnetic resonance imaging (MRI) scans, which can reveal adjacent tumors, neurovascular conflicts, arteriovenous malformations (AVMs), demyelinating lesions, or an elongated styloid process involving the IX and X cranial nerves (CN) [6].

Treatment

see Glossopharyngeal neuralgia treatment.

Case series

Glossopharyngeal neuralgia case series.

1)
Katusic S, Williams DB, Beard CM, Bergstralh EJ, Kurland LT. Epidemiology and clinical features of idiopathic trigeminal neuralgia and glossopharyngeal neuralgia: similarities and differences, Rochester, Minnesota, 1945-1984. Neuroepidemiology. 1991;10(5-6):276-81. PubMed PMID: 1798430.
2)
Rushton JG, Stevens JC, Miller RH. Glossopharyngeal (vagoglossopharyngeal) neuralgia: a study of 217 cases. Arch Neurol. 1981 Apr;38(4):201-5. PubMed PMID: 7213143.
3)
Singh PM, Kaur M, Trikha A. An uncommonly common: Glossopharyngeal neuralgia. Ann Indian Acad Neurol. 2013 Jan;16(1):1-8. doi: 10.4103/0972-2327.107662. PubMed PMID: 23661955; PubMed Central PMCID: PMC3644765.
4)
Rey-Dios R, Cohen-Gadol AA. Current neurosurgical management of glossopharyngeal neuralgia and technical nuances for microvascular decompression surgery. Neurosurg Focus. 2013 Mar;34(3):E8. doi: 10.3171/2012.12.FOCUS12391. Review. PubMed PMID: 23451790.
5)
Silberstein SD, Olesen J, Bousser MG, Diener HC, Dodick D, First M, Goadsby PJ, Göbel H, Lainez MJ, Lance JW, Lipton RB, Nappi G, Sakai F, Schoenen J, Steiner TJ; International Headache Society. The International Classification of Headache Disorders, 2nd Edition (ICHD-II)–revision of criteria for 8.2 Medication-overuse headache. Cephalalgia. 2005 Jun;25(6):460-5. Erratum in: Cephalalgia. 2006 Mar;26(3):360. PubMed PMID: 15910572.
6)
Ordónez-Rubiano EG, García-Chingaté CC, Rodríguez-Vargas S, Cifuentes-Lobelo HA, Perilla-Cepeda TA. Microvascular Decompression for a Patient with a Glossopharyngeal Neuralgia: A Technical Note. Cureus. 2017 Jul 20;9(7):e1494. doi: 10.7759/cureus.1494. PubMed PMID: 28948114; PubMed Central PMCID: PMC5606712.