Hyperactive dysfunction syndrome

Hyperactive dysfunction syndrome (HDS) of the cranial nerves, such as trigeminal neuralgia (TN), hemifacial spasm (HFS), and glossopharyngeal neuralgia (GPN), are commonly managed via microsurgery. However, certain cases may present a combination of these syndromes.

Zhang et al., aimed to retrospectively assess patients with combined HDS from a single center.

Of 1275 consecutive patients with HDS treated at the center between 2007 and 2017, 37 patients with combined HDS were enrolled, and their medical and surgical records were analyzed.

The patients with combined HDS, accounting for 2.9% of all patients with HDS, included 22 cases with bilateral TN, 5 cases with TN-HFS, 8 cases with TN-GPN, and 2 cases with GPN-HFS. A comparison of patients with single and combined HDS indicated a significant difference in the mean age at initial diagnosis (63.57 vs 56.18 years, P=0.000), but no such difference in the sex ratio (0.54 vs. 0.59, P=0.865) or incidence of hypertension (32.43% vs. 24.56%, P=0.274). In total, 32 microvascular decompression (MVD) procedures were performed in the 27 patients with combined HDS, and repeat MVD was required in 5 patients with bilateral TN. Of the 27 patients who underwent MVD, 25 (92.6%) exhibited clinical cure or obvious alleviation.

Combined Hyperactive dysfunction syndrome (HDS) involves a group of functional disturbance disorders affecting specific cranial nerves, and may include TN, HFS, and GPN. In addition to gender and hypertension incidence, age appeared to be a vital parameter for developing combined HDS, although this finding was inconsistent in previous studies. MVD appears to be a safe and effective treatment for combined HDS, with a high rate of long-term success ¹⁾.

Unclassified

- 2: Sindou M, Mercier P. Hemifacial spasm associated with other cranial nerve syndromes: Literature review. Neurochirurgie. 2018 May;64(2):101-105. doi: 10.1016/j.neuchi.2018.01.002. Epub 2018 Apr 19. Review. PubMed PMID: 29680282.
- 3: Cao J, Jiao J, Du Z, Xu W, Sun B, Li F, Liu Y. Combined Hyperactive Dysfunction Syndrome of the Cranial Nerves: A Retrospective Systematic Study of Clinical Characteristics in 44 Patients. World Neurosurg. 2017 Aug;104:390-397. doi: 10.1016/j.wneu.2017.05.020. Epub 2017 May 13. PubMed PMID: 28512048.
- 4: Duransoy YK, Mete M, Akçay E, Selçuki M. Differences in individual susceptibility affect the development of trigeminal neuralgia. Neural Regen Res. 2013 May 15;8(14):1337-42. doi: 10.3969/j.issn.1673-5374.2013.14.010. PubMed PMID: 25206428; PubMed Central PMCID: PMC4107645.
- 5: Guclu B, Sindou M, Meyronet D, Streichenberger N, Simon E, Mertens P. Cranial nerve vascular compression syndromes of the trigeminal, facial and vago-glossopharyngeal nerves: comparative anatomical study of the central myelin portion and transitional zone; correlations with incidences of corresponding hyperactive dysfunctional syndromes. Acta Neurochir (Wien). 2011 Dec;153(12):2365-75. doi: 10.1007/s00701-011-1168-1. Epub 2011 Sep 27. PubMed PMID: 21947457.

- 6: Kasperlik-Załuska AA. Nelson's syndrome: physiopathology, management and prognosis. Expert Rev Endocrinol Metab. 2010 Mar;5(2):291-296. doi: 10.1586/eem.09.56. PubMed PMID: 30764053.
- 7: Yang KH, Na JH, Kong DS, Park K. Combined hyperactive dysfunction syndrome of the cranial nerves. J Korean Neurosurg Soc. 2009 Oct;46(4):351-4. doi: 10.3340/jkns.2009.46.4.351. Epub 2009 Oct 31. PubMed PMID: 19893725; PubMed Central PMCID: PMC2773393.
- 8: Kayaba H, Hebiguchi T, Itoh Y, Yoshino H, Mizuno M, Morii M, Adachi T, Chihara J, Kato T. Evaluation of anorectal function in patients with tethered cord syndrome: saline enema test and fecoflowmetry. J Neurosurg. 2003 Apr;98(3 Suppl):251-7. PubMed PMID: 12691380.
- 9: Kobata H, Kondo A, Iwasaki K, Nishioka T. Combined hyperactive dysfunction syndrome of the cranial nerves: trigeminal neuralgia, hemifacial spasm, and glossopharyngeal neuralgia: 11-year experience and review. Neurosurgery. 1998 Dec;43(6):1351-61; discussion 1361-2. Review. PubMed PMID: 9848849.
- 10: Sindou M. Microsurgical DREZotomy (MDT) for pain, spasticity, and hyperactive bladder: a 20-year experience. Acta Neurochir (Wien). 1995;137(1-2):1-5. PubMed PMID: 8748859.
- 11: Kryzhanovskiĭ GN. [Basic theory of nervous system disorders: generative, determinant and systemic mechanisms]. Vestn Ross Akad Med Nauk. 1993 Jul-Aug;(7):17-24. Review. Russian. PubMed PMID: 7694705.
- 12: Cline MA, Ochoa J, Torebjörk HE. Chronic hyperalgesia and skin warming caused by sensitized C nociceptors. Brain. 1989 Jun;112 (Pt 3):621-47. PubMed PMID: 2731024.
- 13: Fisher CM. Honored guest presentation: abulia minor vs. agitated behavior. Clin Neurosurg. 1983;31:9-31. PubMed PMID: 6149834.

Zhang YQ, Yu F, Zhao ZY, Men XZ. Combined hyperactive dysfunction syndrome of the cranial nerves: analysis of 37 cases and literature review. World Neurosurg. 2019 May 31. pii: S1878-8750(19)31514-1. doi: 10.1016/j.wneu.2019.05.237. [Epub ahead of print] PubMed PMID: 31158546.

From:

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

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=hyperactive dysfunction syndrome

Last update: 2024/06/07 02:51

