Cervicogenic headache

- Emerging Clinical Roles of Gabapentin and Adverse Effects, Including Weight Gain, Obesity, Depression, Suicidal Thoughts and Increased Risk of Opioid-Related Overdose and Respiratory Depression: A Narrative Review
- Outcomes of recombinant growth hormone therapy in the traumatic brain injury population: A scoping review
- Greater Occipital Nerve Block as an Opioid-Sparing Alternative in Scalp Surgery: A Case Series
- Insomnia symptoms amongst those with acute post-traumatic headache attributed to mild traumatic brain injury
- Effect of Mulligan manual therapy and exercise on headache frequency, intensity, disability, and upper cervical joint hypomobility in people with episodic tension-type headache: a randomized clinical trial
- Transcranial Photobiomodulation Improves Cognitive Function, Post-Concussion, and PTSD Symptoms in Mild Traumatic Brain Injury
- Comparative safety and efficacy of manual therapy interventions for cervicogenic headache: a systematic review and network meta-analysis
- Identifying and predicting headache trajectories among those with acute post-traumatic headache

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Cervicogenic headache] (CGH) is defined as referred pain from various cervical structures innervated by the upper three cervicals spinal nerves.

Cervicogenic headaches of suboccipital headaches, retro-orbital pain, retro-auricular pain, or temporal pain may be associated with C2, C3, and C4 radiculopathies. The pain around scapula may be associated with C5, C6, C7, and C8 radiculopathies. However, there is insufficient evidence to make recommendations for the use in clinical practice because they did not evaluate sensitivity and specificity [1].

A comparison has been made between the cervicogenic headache criteria in the new IHS classification of headaches (3(rd) edition- beta version) and The Cervicogenic Headache International Study Group's (GHISG) criteria from 1998. In a more recent version, the CHISG criteria consist of 7 different items. While “core cases” of cervicogenic headache (CEH) usually fulfill all 7 criteria, the IHS classification - 3(rd) edition beta version- fulfills only 3 criteria. Although the new three beta version represents an improvement from the previous one, it does not quite seem to live up to the expectations for a diagnostic system for routine, clinical use [2].

Epidemiology

Cervicogenic headache affects a significant portion of the entire population [3].

Potential pain generators

Include the atlantooccipital joint, atlantoaxial joint, C2-3 zygapophysial joint, C2-3 intervertebral disc, cervical myofascial trigger points, as well as the cervical spinal nerves. Various interventional

techniques, including cervical epidural steroid injection (CESI), have been proposed to treat this disorder. And while steroids administered by cervical epidural injection have been used in clinical practice to provide anti-inflammatory and analgesic effects that may alleviate pain in patients with CGH, the use of CESI in the diagnosis and treatment of CGH remains controversial [4].

Diagnosis

This type of headache especially with atypical presentation is often hard to diagnose and manage since its etiopathophysiology is not been yet well understood.

A notable portion of patients with cervicogenic headaches can have an atypical presentation mimicking a primary-type headache. However, cervicogenic headaches with atypical presentation can be difficult to diagnose and manage during the initial visit of the patients. Etiopathophysiology of this type of headache could be explained by the theories including discogenic, convergence and sensitization-desensitization theories. When cervicogenic headache is accompanied by CDD, performing ACDF or laminectomy would be the treatment of choice. Surgical intervention can also relieve the accompanying neck, shoulder and extremity pain with minimal complications. Lastly, outcomes of surgical intervention depending on the patients' morbidities including obesity, smoking, and depression [5].

The Cervical Flexion-Rotation Test (CFRT) is widely used in the assessment of upper cervical spine mobility impairments and in the diagnosis of cervicogenic headache (CGH) by physiotherapist. Many studies investigated its different properties, and the results show that the CFRT has good construct validity in the measurement of C1-C2 rotation as well as good to excellent reliability [6].

Treatment

Cervicogenic headache treatment

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