Cervicogenic Headache

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The cervicogenic headache commonly occurred in patients, aged 30-50 years old with the incidence of 1-4% among patients with headache. The pathophysiology is the referred pain from upper cervical spine, C1-3, pathology, for instance, atlantoaxial arthropathy, C2-3 facet arthropathy. There was a convergence of pain signal between C1-3 nucleus and trigeminocervical nucleus. Thus, the trigeminocervical nucleus received a pain signal from trigeminal branches as well as an afferent pain fiber from C1-3 dermatome.

The ICHD-3 (third edition of the international classification of headache disorder) diagnostic criteria of cervicogenic headache included headache 1) developed in the onset/appearance of cervical disorder, 2) improved after treatment of cervical disorder, 3) is worse by provocative maneuver, there was limited range of motion of the cervical spine and 4) abolished following diagnostic blockade of a cervical structure.

The clinical features of typical cervicogenic headache included unilateral pain, pain started in the neck or occipital area, getting worse with cervical movement and associated with decreased range of motion of the cervical spine.

To differentiate from migraine, there was less nausea, vomiting, photo/phonophobia. It is challenging to distinguish from cervical myofascial pain or tension type headache which is usually bilateral headache.

The conservative pain management including physiotherapy and oral analgesics is the first line of treatment. If ineffective, pain procedures such as lateral atlantoaxial joint intra-articular injection, C2-3 facet injection or radiofrequency ablation (RFA) of the third occipital nerve or pulsed RF of C2 dorsal root ganglion might be considered. There was limited evidence for cervical epidural steroid injection.