Unilateral Headache with Features of Hemicrania Continua and Cervicogenic Headache - A Case Report

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SYNOPSIS

A case is presented which has features of Cervicogenic Headache and of Hemicrania Continua. A sudden maneuver of the neck and later a greater occipital nerve block, both resulted in relief of the pain. A cervical cause is suggested.

Key Words: Cervicogenic, Hemicrania Continua, sudden maneuver, greater occipital nerve, cervical cause.

A 30-year-old woman presented complaining of right retro-orbital headaches.

History. The patient stated that she had been well until about one year prior to consultation when she started to develop right retro-orbital headaches. Since the time of their onset, they occurred on a daily basis.

She noted that initially they lasted most of the day but would clear up later in the day. However, after a few months they changed character. The headaches then became continuous on the right side, although they fluctuated in intensity throughout the day. She also noted that her right eye twitched and that the right side of her face swelled up from time to time. This was associated with the pain. In addition, she had reddening of the right eye associated with the pain.

Previous Investigations. The physician who had initially seen her diagnosed a cluster type of headache. She was referred to a dentist who found no pathology of the teeth or gums. In addition, she saw an ear, nose, and throat specialist who found no pathology of the sinuses. The second consultant who saw her diagnosed a form of chronic hemicrania. She was treated with indomethacin, and this almost entirely relieved the headache. However, it produced symptoms of gastric irritation, and she was given another anti-inflammatory agent by her family doctor. The new anti-inflammatory was not nearly as helpful as the indomethacin had been. About six weeks prior to the consultation, she was trying to forcibly shut the trunk of her car which kept flipping open. During these exertions, she felt something snap in her neck, and her headache immediately cleared up. She had complete relief of the right retro-orbital headache for about two weeks following the incident. The pains, however, gradually returned, and when seen in consultation, they were almost as severe and constant as they had been. Further inquiry revealed that she also had the pain in the right supraorbital and infraorbital area as well as in the right retro-orbital area. In addition, she had some pain in the craniocervical junction.

Past History and Family History. She had a family history of migraines. However, she had only had an occasional migraine and had not had any for five years to prior to the consultation. She had been involved in a motor vehicle accident about 12 years previously. She had suffered a whiplash injury at that time, but had recovered quickly and uneventfully.

Physical Examination. The right greater occipital area was tender to 2+. The left greater occipital nerve area was tender to 1+. The right paracervical muscle was tender with spasm. The left paracervical muscle was not especially tender nor in spasm. The posterior facet joints from C2 to C4 on the right side were extremely tender to palpation, and deep pressure there elicited some of the right retro-orbital pain.

Cervical spine X-rays showed mild narrowing of the disc space between C4-5 and C5-6 with mild marginal osteophyte formation at the antero-inferior margin of C4-6. Pillar views showed moderate degenerative osteoarthritic changes between the facet joints of C2-3 bilaterally and mild changes at C3-4 on the right. The joints between the lateral masses of C1 and C2 were also slightly narrowed on the right side. The patient's head was tilted slightly to the right side, and a mild torticollis was suspected, perhaps associated with muscle spasm and neck pain.
Diagnosis. This case had some features of Hemicrania Continua\textsuperscript{1-3}: specifically: unilateral pain, ipsilateral autonomic changes, and response to indomethacin. However, it also had features of Cervicogenic Headaches as defined by Sjaastad\textsuperscript{2}. These features were unilateral pain of non-clustering type but which was continuous and fluctuating.

Treatment. The patient was treated with a right greater occipital nerve block using Xylocaine 2%, 5 ml, with Depo-Medrol \textsuperscript{8} 80 mg. In addition, 1 ml of Xylocaine with Depo-Medrol \textsuperscript{8} was injected into the right C3-4 facet joint area. This latter block was carried out blind, by palpation. Within 10 minutes, the headache was entirely relieved. Two months later, there had been no return of the headache.

DISCUSSION

It has been widely demonstrated that headaches can arise from pathology in the posterior neck structures.\textsuperscript{4-14} Presumably the mechanism of the headache is due to convergence of the fibers from the C2 and C3 nerves with trigeminal afferents at the spinal nucleus of the trigeminal nerve.\textsuperscript{15-16}

The relief produced by a sudden movement of the neck, as well as the relief with the occipital and paravertebral blocks, suggest that neck pathology was implicated in the pathogenesis of the pain. The fact that the diagnosis was not a clear-cut case of Hemicrania Continua or of Cervicogenic Headache could be explained on the following basis:

Namely, that it is possible that pathology of the neck can trigger various types of headache syndromes. In the presented case, there were features of two of these syndromes. If this is the case, it would be useful to look carefully for cervical causes in various types of headache syndromes, rather than to try to separate the syndromes into numerous different types. Trying to find a single or, at most, a few etiologies would satisfy Occam's dictum.

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REFERENCES