Cervicogenic Headache in Children

The etiology of chronic headache has been less carefully investigated in the pediatric population than in adults, and authors frequently are concerned primarily with psychogenic causes. Koenig et al suggested that children and adolescents with chronic daily headache have a single syndrome that often paroxysmally worsens and gathers migrainous features.[1] Fichtel and Larsson, in contrast, found that among adolescents suffering from recurrent headaches, two thirds reported other frequent pain. They recommended that adolescents routinely should be asked about the presence of other symptoms.[2]

Each year about 200 patients are referred to the Manual Medicine Department of the National Institute for Rheumatology and Physiotherapy, Budapest. During the past 30 years, I have seen nearly 6000 patients with suspected cervicogenic headache, 10% of whom were children or adolescents. Around 30% of these young patients reported recurrent headaches that occurred weekly or more frequently. I found that congenital or traumatic laxness of the transverse ligament of atlas appeared to be the pain-generating mechanism in approximately 15% of such cases. Gutman called this "ante-flexion" or "school children's headache."[3] The dens-atlas distance is greater than 5 nm, while the dens-clivus angle is decreased on a lateral x-ray involving flexion of the cervical spine. Pain ccurs typically following the second or third hour of chool, as the head is bent forward for ever longer peods. According to Lewit, mechanical stretching of he transverse ligament is a typical pain-generating echanism.[4] In the majority of such cases, however, e pain-generating mechanism is more complex, nce the mechanical stretching of the ligament is asciated with a reversible blockage of the atlantorcipital joint.[4,5] Sometimes the dens compresses the encephalons, resulting in headache.[3] In my experince, a painful spasm of the extensor muscles due to n increased forward bending position of the neck, ofen accompanies the headaches of children.[5] Systemic usculoskeletal hypermobility, including hypermobily of the cervical spine, frequently explains the comoridity of headaches with transitory pains in the locootor system of children. I suggest, therefore, that in hildren with headaches, one should first look for oranic/cervicogenic pain-generating mechanisms.

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