

CRANIOVERTEBRAL – CRANIOMANDIBULAR DISORDERS IN HEADACHE PATIENTS

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“If I wished to show a student the difficulties of practice, I should give him a headache to treat.

(Oliver Wendell Holmes)

For centuries headaches have troubled mankind. It is known that since 3000 B.C. drastic measures were adopted to alleviate a headache. They penetrated the bony skeleton to free the evil demons who were responsible to cause the “untreatable headache symptom”. Later in 400 B.C. Hippocrates described the combination of visual disturbances, headache and nausea. 200 years later Galenus named this combination of symptoms “HEMICRANIA”(1).

In 1934 Costen (2), ENT specialist, described a combination of signs and symptoms connected with the pathological Temporomandibular Joints. Later, the Costen Syndrome became the most important concept of dysfunction of the masticatory system related to facial Pain.

Although Costen in 1934 (2), mentioned headaches as the most prevalent symptoms in his article, many others as Berlin et al (3) were the first ones to mention the close relation between Craniomandibular disorders and Headaches.

Later many studies confirmed this association (4-5-6-7). These studies demonstrated the incidence of Craniomandibular disorders (CMD) in headache patients

and showed an alleviation of headaches after treatment of the musculoskeletal system of the Temporomandibular joints, occlusion and related structures. Later in 1982, Lous and Oleson (9) and Forssel in 1985 (10) were the first ones to consider the neurologic diagnosis of the headaches in studies on the prevalence of CMD., in general headache patients.

Back in 1984 - 1987 Rocabado (11- 12 - 13) showed that 65.1 % of the pediatric population being treated for Orthodontic purpose, were symptomatic for headache conditions and showed, as one of the most important findings, a loss of the physiological curvature of the spine with a straight or an inverted spine. This might be the reason why such large percentage of young pediatric

population between the ages of 8 to 12 years present loss of cervical lordosis and are symptomatic. This is the beginning of a multifactorial condition for common headache patients that is not a problem of age. Later Rocabado showed that degeneration of the spine in symptomatic patients was as high as 68 % in patients that had loss of the physiological curvature of the spine with abnormal craniocervical relation.

At present, it is well recognized that the influence of abnormal musculoskeletal relation of the head, the neck and the shoulder girdle are a common finding in Headache patients (14). In this study, 372 patients were diagnosed as having Tension Type Headaches (TTH) compared with 225 control subjects. The largest percentage showed a loss of the cervical lordosis with sustained flexor muscle contraction that contributed to the loss of the physiological curvature, mainly the Longi Colli, Hyoid musculature, Anterior and medius scalmi and the SCM muscle. Low set shoulder with hyperactivity of the neck flexors, exert a posterior rotation of the craniocervical region with increased activity of the suboccipital musculature. The passive occipital loading is one of the major pathophysiologic causes of the suboccipital and hemicranial type headaches.

A radiographic study of the craniocervical relation in patients between 8 and 12 years of age, under orthodontic treatment, has demonstrated that 65.1 % are already symptomatic.

The joint and/or muscular pathology is not a problem of age; degenerative process can be present at any age, without pain, usually undiagnosed.

The major pathological findings are related to abnormal relation between Occiput, Atlas and Axis with loss of Craniovertebral Centric Relation. This biomechanical abnormal relation can induce an abnormal pattern of growth and development of the Occlusal plane and Facial Assymetry.

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ORTHOPAEDIC MANUAL THERAPY IN SYNOVIAL TEMPOROMANDIBULAR JOINT DISC PATHOLOGY

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Acute Temporomandibular disc subluxations are common pathological conditions with occlusal trauma or external mandibular trauma that can be reduced and stabilized with a musculoskeletal approach. Chronic luxated discs without reduction need a combined treatment approach of both dental and physical therapy.

Common symptoms are those of pain in the Temporomandibular joints and masticatory muscles , restricted mouth opening and joint sounds.

Exercise therapy has been used for a long time to treat musculo- skeletal disorders. It has shown its effectiveness in reducing pain and improving strength, endurance and functional capacities. Orthopaedic manual therapy is an effective treatment of Temporomandibular joint disc pathologies.