

TEMPOROMANDIBULAR DISORDERS INCIDENCE AND SEVERITY IN RELATION TO TRAUMA FEATURES

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ABSTRACT

Back ground: Temporomandibular joint disorders are very common ailments that involve the articular joints, masticatory muscles, head and neck region. Temporomandibular disorders are thought to have a multifactorial etiology and the role of trauma in such disorders is somewhat controversial.

Aims of the study: to find out the incidence of temporomandibular disorders in patient submitted to trauma from various causes and relating the finding to the cause and severity of trauma and declaring the importance of trauma factor in initiating dysfunctional signs.

Materials and Methods: The temporomandibular disorders were investigated in 171 (124 males, 47 females) patients and their age range was between (5-61) years with facial trauma and treated in maxillofacial departments in two hospitals in the middle region of Iraq.

In each patients temporomandibular joint were examined by questionnaires to find subjective symptoms and clinical examination to find the objective signs depending on Helkimo index ,those patients with fracture mandible were examined after 2 weeks from removal of inter maxillary fixation, the patients complain from muscle tenderness had been submitted to electromyography examination by surface electrode . The results were compared with 100 age and gender matched subjects attending dental clinic and who had no history of trauma .

Results: The most common cause of trauma was motor cycle accidents followed by war victims and finally bike riders. Multiple site of trauma resulted on patients was most common finding than other site on the face. Subjective symptoms were recorded in 37 (21.6%) of trauma patients the most common complain were pain on movement of mandible

and pain in temporomandibular joint region and war victims had more subjective symptoms than others.

Clinical signs were found in 61(35.6%) of the study group. The most frequent clinical sign was impaired range of movement .The clinical signs of TMDs were more prevalent and severe in study group than control group specially impaired range of movement, muscle tenderness, deviation of mandible and pain on movement of mandible. War and motor cycle accidents victims had more clinical signs than others.

Electromyography examination to patients with complains of muscle tenderness done only to nine patients from 17 patients and only three of them confirmed clinical examination and show muscle involvement.

Patients with severe or moderate facial injury were present with more and severe dysfunctional signs. Patients without any clinical finding after trauma also present with complain and some times severe signs.

Conclusions: Subjective symptoms were more prevalence and severe in trauma patients than control group, while clinical signs of temporomandibular joint disorders were found in about on third of trauma group, Limitation of mouth movement were severe and more frequent in study group and depending on the degree of severity of trauma and injury, the strong massive trauma resulted in worst injury and worse sequels.