Evaluation of cervical dysfunction in patients with Myofascial Pain Dysfunction Syndrome.

By

Dr. DURGA RAJARAM OKADE

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Dr. Venkatesh G. Naikmasur

Professor and Head

Department of Oral Medicine and Radiology

S.D.M College of Dental Sciences

DHARWAD

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ABSTRACT

Background and objectives: More and more clinicians are recognizing the presence of signs and symptoms of craniocervical dysfunction in many of their patients with temporomandibular disorders. The exact relationship between cervical dysfunction and various temporomandibular joint and painful muscle conditions in the temporomandibular region are still unclear. Hence this study was performed to establish the role of cervical dysfunction in myofascial pain dysfunction syndrome and to find the origin of pain in patients with myofascial pain dysfunction syndrome for the effective treatment and cure of pain.

Methodology: The patients of MPDS were selected on the basis of Laskin's criteria. 20 patients suffering from MPDS with cervical dysfunction were taken in the study group (Group 1) and 20 patients of MPDS without cervical dysfunction were taken up as a positive control group (Group 2). Following history & subjective assessment of the VAS & GPI scores, patients were examined for the TMJ, muscles of mastication, maximum comfortable mouth opening, clicking and deviation of TMJ, neck muscles, cervical range of motion. Patients in Group 1 were treated with physiotherapy to the cervical muscles and patients in Group 2 were given physiotherapy to the muscles of mastication. All these patients were assessed for relief of signs and symptoms of MPDS. The treatment was given for maximum of 5 days. The response was checked on the last day of treatment and then during the three months of follow up.

Results: When the intra group comparison was done in group 1 and group 2, GPI & VAS scores, number of tender muscles showed a significant improvement from the time of diagnosis and through the three months of follow up. In both the groups there was an improvement in the maximum comfortable mouth opening during the follow up. In group 1, clicking and deviation did not show a significant improvement during

the follow up whereas during the follow up in group 2 there was an improvement in the clicking. With respect to deviation and TMJ tenderness, group 1 and group 2 did not show any improvement. In the inter group comparison it was seen that both the groups responded equally well to physiotherapy with a reduction in the VAS, GPI scores, number of tender muscles and maximal comfortable mouth opening immediately post treatment and during the follow up period. There was an improvement in clicking seen in group 2 as compared to group 1 in the first 2 months of follow up. There was reduction in the TMJ tenderness in group 1 as compared to group 2 only in the 2^{nd} and 3^{rd} months of follow up.

Interpretation and conclusion: it was evident from the study that physiotherapy to the neck muscles brought about significant improvement in the signs and symptoms of MPDS. This explains the fact that cervical dysfunction could be one of the extrinsic etiology for MPDS.

Keywords: Myofascial Pain Dysfunction Syndrome; cervical dysfunction; trigeminocervical complex; physiotherapy; forward head posture.