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Introduction

Temporomandibular disorders (TMD) are considered as a heterogeneous group of psychophysiological disorders of the stomatognathic system (1). They are frequently initiated by pain, joint sounds and limited function / mandibular movement, being considered one of the main cause of orofacial pain of non-dental origin (2). Among the TMD of articular origin, disc displacements with and without reduction, osteoarthritis and osteoarthritis are the most frequent alterations in patients (3). Conservative and non-invasive treatment is considered as the first choice (4) and physical therapy is indicated as one of the most frequently recommended types of treatment (5).

Objective

The objective of the present study was to analyze the effects of the condylar distraction technique after four weeks of intervention regarding pain, joint noises and amplitude of mouth opening.

Results

Condylar distraction technique increased motion range values of the mandible from T0 to T1 in EG group ($p=0.012$) and decrease value of pain intensity in T1 when compared to T0 in the EG group ($p=0.008$). There were no changes in joint noises when comparing T0 with T1 in both groups.

Tabel 1 – Pain and Motion Range, before (T0) and after intervention (T1) in EG

Experimental group	T0 (mean ± sd)	T1 (mean ± sd)	p*
Pain (0-10)	7.4 ± 1.3	0.8 ± 0.8	0.008
Montion range (mm)	41.5 ± 3.5	30.1 ± 2.6	0.012

* p<.05

Tabel 2 – Pain and Motion Range, before (T0) and after intervention (T1) in CG

Control group	T0 (mean ± sd)	T1 (mean ± sd)	p*
Pain (0-10)	5.5 ± 1.2	7.0 ± 1.4	0.008
Montion range (mm)	34.4 ± 1.4	33.6 ± 1.8	0.840

* p<.05

Discussion and Conclusion

It is concluded that the condylar distraction technique has positive effects on pain and range of motion of the mandible. However, joint noises remained present after intervention, concluding that condylar distraction has no effect on noise reduction. Recent evidence suggests that manual therapy is a legitimate treatment for TMD promoting improvement in mouth opening and reduction in jaw pain (6). However further investigations should be carried out with larger samples in the future.

References:

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