Does successful TMD-treatment improve concurrent headache complaints in TMD patients?

van der Meer, H.A.; Calixtre, L.B.; Engelbert, R.H.H.; Nijhuis-van der Sanden, M.W.G.; Speksnijder, C.M.; Visscher, C.M

Citation for published version (APA):
Does successful TMD-treatment improve concurrent headache complaints in TMD patients? Preliminary results of a prospective cohort study.

H.A. van der Meer1-5, L.B Calixtre6, R.H.H. Engelbert2,3, M.W.G. Nijhuis- van der Sanden1, C.M. Speksnijder5, C.M. Visscher4

1Radboud University Medical Center, Research Institute for Health Sciences, Nijmegen, the Netherlands; 2Amsterdam University of Applied Sciences, Faculty of Health, the Netherlands; 3Academic Medical Center, Department of Rehabilitation, Amsterdam, the Netherlands; 4Academic Center for Dentistry Amsterdam, Department of Oral Health Sciences, the Netherlands; 5University Medical Center Utrecht, Department of Oral-Maxillofacial Surgery, the Netherlands; Physiotherapy Department, Federal University of São Carlos, São Carlos, Brazil

Introduction

Temporomandibular disorders (TMD) and headache are co-morbid disorders. It is unknown if a successful TMD-treatment will lead to an improvement of the headache. The aim of this study is to establish the association between change in orofacial pain (OFP) and change in headache in patients with TMD-pain after TMD-treatment.

Methods

Inclusion:
Patients with TMD-pain and headache

Baseline
Multi-disciplinary usual care: Physical therapy, splint, counseling, psychology

Follow-up 12 weeks

Outcomes (collected by email)
Graded Chronic Pain Scale (GCPS)
• Chronic Pain Intensity (CPI)
• Disability Score

Statistics
• Change scores between baseline and 12 weeks
• Spearman’s rho correlation

Results

50 participants included: 40 women and 10 men. The mean age was 40.5 (SD 14.4). Myalgia was present in 28 people, arthralgia in 19.

<table>
<thead>
<tr>
<th></th>
<th>CPI</th>
<th>Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-reported headache (n=50)</td>
<td>0.585***</td>
<td>0.588***</td>
</tr>
<tr>
<td>Migraine (n=17)</td>
<td>0.661**</td>
<td>0.758***</td>
</tr>
<tr>
<td>Tension-Type headache (n=15)</td>
<td>0.398</td>
<td>0.326</td>
</tr>
<tr>
<td>Secondary headache attributed to TMD (n=14)</td>
<td>0.636*</td>
<td>0.569*</td>
</tr>
</tbody>
</table>

Table 1 – correlation coefficients of the association between the change in OFP scores and change in headache scores. *p<0.05; **p<0.01; ***p<0.001.

TAKE HOME MESSAGE
➢ Successful TMD-treatment reduces concurrent headache complaints in patients with TMD-pain.
➢ Strongest association between changes found for patients with migraine.
➢ Patients with secondary headache attributed to TMD as well as patients with migraine benefit from a multidisciplinary TMD-treatment.

Contact: h.a.van.der.meer@hva.nl

Funding: