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The effect of musculoskeletal TMD-treatment for temporomandibular disorders on headache: a systematic review.

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Introduction

Headaches and temporomandibular disorders (TMD) are comorbid disorders within the biopsychosocial model.

Headache and TMD have shared prognostic factors such as gender, psychosocial factors and bruxism.

Will a musculoskeletal TMD-treatment decrease the headache?

Methods

• Registration: PROSPERO (CRD42017062487)

Systematic Search

115 identified and screened

✓ RCT / CCT
✓ Headache pain intensity
✓ Musculoskeletal TMD-treatment

X Splint therapy

6 included in review; quality assessment with PEDro scale\textsuperscript{1-6}

≥4 PEDro score

5 included in evidence synthesis with GRADE recommendations\textsuperscript{5,6}

References (bold references included in synthesis):

TMD-treatment

<table>
<thead>
<tr>
<th>Biological</th>
<th>Psychosocial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical problems from the joints and/or muscles.</td>
<td>Psychosocial factors like stress and depression that are associated with perseverance of complaints.</td>
</tr>
<tr>
<td>Manual therapy jaw/cervical spine; massage therapy; stretching; exercise.</td>
<td>Counseling, education, stress management.</td>
</tr>
</tbody>
</table>

Results

Biological focused (n=2)\textsuperscript{5,6}

• Between-group effect size: 0.19
• High risk of bias
• Very low level of evidence for no effect

Psychosocial focused (n=3)\textsuperscript{2-4}

• Between group effect size: 0.61
• High risk of bias
• Very low level of evidence for a medium effect

Overall TMD-treatment (n=5)\textsuperscript{2-6}

• Between-group effect size: 0.32
• High risk of bias, high inconsistency
• Very low level of evidence for no effect

AIM

To systematically evaluate the literature on the effectiveness of musculoskeletal TMD-treatment on concomitant headache.

References:

• There is currently a very low level of evidence that counseling has a medium effect on headache complaints in patients with TMD.

• Future research should describe the efficiency of combined interventions within the biopsychosocial model and the underlying construct.

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