

Long-term development of temporomandibular disorders in rheumatoid arthritis

Akademisk avhandling

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av

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This thesis is based on the following studies, referred to in the text by their Roman numerals.

- I Wenneberg B, Könönen M, Kallenberg A.
Radiographic changes in the temporomandibular joint of patients with rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis.
J Craniomandib Disord 1990; 4:35-9.
- II Könönen M, Wenneberg B, Kallenberg A.
Craniomandibular disorders in rheumatoid arthritis, psoriatic arthritis, and ankylosing spondylitis.
Acta Odontol Scand 1992; 50:281-7.
- III Kallenberg A, Wenneberg B, Carlsson GE, Ahlmén M.
Reported symptoms from the masticatory system and general well-being in rheumatoid arthritis.
J Oral Rehabil. 1997; 24:342-9.
- IV Kallenberg A, Ahlmén M, Wenneberg B.
Long-term development of signs and symptoms from the temporomandibular system in rheumatoid arthritis. A 15-year follow-up.
Submitted to J Orofac Pain 2013
- V Kallenberg A, Ahlmén M, Wenneberg B.
The temporomandibular joint and alveolar bone level in rheumatoid arthritis. A 15 year follow-up.
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Long-term development of temporomandibular disorders in rheumatoid arthritis

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Abstract: Inflammatory joint diseases can affect the temporomandibular joint (TMJ), but there has been uncertainty to what extent. There has also been a need for knowledge about the long-term outcome in the temporomandibular system for a general inflammatory joint disease. The overall aim for this thesis were to investigate these issues. The first two studies concerning rheumatic arthritis(RA), psoriatic arthritis(PA), ankylosing spondylitis(AS) and a healthy controllgroup(C) showed that there are higher frequencies of temporomandibular signs and clinical and radiological findings than in a normal population and they are generated from the general disease. The following three studies compared RA with a group (C) of patients with TMD symptoms but without general joint disease in a 15 year perspective. At “baseline” the RA group showed less subjective symptoms and reported almost normal general well-being but more physical discomfort compared to the C-group. In the the long-term subjective signs, clinical and radiological findings from the temporomandibular system, approximal bone loss(ABL), medical data(DAS,CRP,RAI,SJC,HAQ), general well-being(MACL) and body symptom scale(BSS) were investigated. The RA group showed no changes subjectively and clinically on a $p<0.01$ level, although there were tendencies to clinical degradation. Radiologically there was a clear and significant impairment in the TMJ and ABL. There was no clear correlation to the disease activity, which stayed on a medium level, indicating a stable situation for these patients, although the temporomandibular system and alveolar approximal bone loss had degraded. Their decreased mental well-being can be to the chronic disease and its consequences, while the stable self-rated physical discomfort can be a result of adapting to a their situation. The C group in this study had in general improved, which indicates a good prognosis for TMD patients in the long-term, although their mental well-being was unchanged and physical health had degraded. An important factor in the RA group seems to be that the general disease is under control and the patients receive care for their disease. Future studies are important to gain further knowledge regarding the connections between the inflammatory joint diseases and the temporomandibular system and periodontal status.

Keywords: Rheumatoid arthritis, Psoriatic arthritis, ankylosing spondylitis, temporomandibular joint diseases, temporomandibular disorders, long-term evaluation, orthopantomography, approximal bone loss, Health Assessment Questionnaire - HAQ, quality of life questionnaires, laboratory data, DAS 44, Ritchie’s articular index, CRP.

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