PERIODONTAL STATUS BEFORE DIAGNOSIS IN PATIENTS WITH RHEUMATOID ARTHRITIS PREDICTS CUMULATIVE DISEASE ACTIVITY IN YEARS AFTER TREATMENT INITIATION

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Background: Transversal cohort studies demonstrated an association between periodontal disease (PD) and rheumatoid arthritis (RA), but it is unknown how this association evolves during the course and treatment of both conditions.

Objectives: In this study we compared RA and PD before and after RA diagnosis in patients versus controls and analyzed the relationships between disease course and treatment of both conditions.

Methods: Retrospective dental and RA data were analyzed of 95 RA patients from 10 years before up to 10 years after RA diagnosis. Dental data were acquired from general practices and matched healthy control patient data from the university dental college. PD was analyzed via radiographic assessment using the new periodontal classification system from 2017. The relationship was analyzed between PD and RA parameters and treatment.

Results: More RA patients had severe or very severe PD compared to matched healthy controls, already before RA diagnosis. The fraction of RA patients with severe/very severe PD increased from 23% before diagnosis to 43% 5-10 years after diagnosis. Patients with a more severe PD before RA diagnosis had more tooth loss at last dental follow-up and a higher cumulative DAS28 in the years after diagnosis. Two-thirds of patients with severe/very severe PD received appropriate dental care less frequently than advised by guidelines. Suboptimal dental care was associated with a higher cumulative DAS28.

Conclusion: PD occurs before RA diagnosis in a proportion of patients. This proportion increases in the years after diagnosis. PD is associated with a decreased response to treatment of RA. A significant number of RA patients with PD receives suboptimal dental care, which is associated with diminished response to RA treatment.

REFERENCES: