

Oral mikrobiologisk utseende hos individer med kognitiv svikt

Medverkande i forskargruppen

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AIM: The aim was to compare the subgingival microbial community composition among individuals with Alzheimer's disease (AD), mild cognitive impairment (MCI), subjective cognitive decline (SCD) and cognitively healthy controls.

MATERIAL AND METHODS: The study population comprised 132 cases newly diagnosed with AD (n = 46), MCI (n = 40) or SCD (n = 46) and 63 cognitively healthy frequency-matched controls. Subgingival microbiomes were characterized by sequencing 16S ribosomal RNA bacterial genes using the Illumina MiSeq platform.

RESULTS: The most influential variables affecting the microbial composition were related to oral health status. As periodontitis was more prevalent among the cases we could not determine if the between-group differences in subgingival microbial community composition would exist if dental disease burden was equally distributed among the study groups. Periodontitis was associated with a higher alpha diversity, a difference in beta diversity, and a large selection of differentially abundant bacterial taxa.

CONCLUSION: Our findings suggest that a periodontitis-associated subgingival microbiota is associated with dementia and cognitive impairment.