Comparative clinical and radiographical peri-implant findings between non-smokers and smokers

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Presentation Type

Preferred presentation type: E-Poster presentation (either E-Poster Discussion or E-Poster only)

General data

Topic: B4: Peri-implant diseases - aetiology, diagnosis and risk factors/indicator

Abstract text

Background: To compare the clinical and radiographical outcomes between smoking and non-smoking peri-implantitis patients.

Description of the procedure: The present case series included five smoker and five non-smoker patients, each with having at least one dental implant (Eight females and two males, mean age±SD; 49.7±16.09). Socio-demographic variables including age, gender, systemic disease status, medication use, smoking habits, education level, and tooth-brushing habits were recorded. Clinical and radiographical peri-implant parameters such as probing depth (PD), clinical attachment loss (CAL), bleeding on probing (BoP), plaque index (PI), peri-implant bone loss (BL) and the type of destruction in peri-implant tissues were documented. Diagnostic aMMP-8 point-of-care-test [POCT] was performed and peri-implant sulcus fluid (PISF) was sampled from the most severe peri-implant site as well.

Outcomes: The frequency of tooth brushing was recorded as 1.6±0.49 times per day in smokers and the number of time was 1.3±0.86 per day in smokers. The mean time for implant placement was 8±4.05 years in non-smokers and 10.4±5.46 years in smokers. The peri-implant bone loss percentage was 27.6%±23.16% in non-smokers and 15.6%±12.22% in smokers. PISF values were 98.8±61.8 µL in non-smokers and 51.4±37.83 µL in smokers. The mean PD value was 2.08±0.42 mm in non-smokers and 2.42±0.42 mm in smokers. The mean CAL was 2.76±1.28 in non-smokers and 3.28±1.69 in smokers. The mean BoP % was calculated as 51.2%±14.72% in non-smokers and 48%±5.10% in smokers. The mean PI was 44.2%±8.75% in non-smokers and 55.2%±8.35% in smokers. Diagnostic aMMP-8 POCT displayed similar results in all cases.

Conclusions: Clinical and radiographical examinations revealed that smoker individuals with peri-implantitis tended to show impaired outcome measures compared to non-smokers. Pronounced oral fluid values were observed in smokers.

Disclosure

Conflict of interest to declare?: No

General

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