of residual pockets were significantly lower in FMD compared to Q-SRP at 3 and 6 months (p < 0.05). Total microorganism levels had significantly decreased at both time-points in FMD and Q-SRP (p < 0.05). In FMD group the mean levels of all test periodontopathogens, but in Q-SRP group only P. gingivalis and P. intermedia were significantly lower at 6 months compared to baseline (p < 0.05).

Conclusion: FMD resulted in a more pronounced improvement in clinical and microbiological parameters than Q-SRP in patients with GAgP over a 6-month period.

**PD084**

Does sex hormone replacement therapy improve clinical periodontal parameters and dental implant osseointegration? – A systematic review and meta-analysis

J.P. Steffens¹, J.D.P. Chaves¹, T.F.F. Massignani¹, SV.S.C. Warnavin¹, C.M. Pannuti²

¹Curitiba/Brazil, ²São Paulo/Brazil

**Background & Aim:** Hormone therapy has been increasingly prescribed in ageing populations for their anti-ageing and age-related symptoms relief effects. Its indication has been proposed in Dentistry with an increase in the number of courses and seminars on this topic in many countries. The objective of this study was to analyse whether sex hormone replacement therapy (HRT) improves periodontal parameters and dental implants osseointegration in humans.

**Methods:** Electronic databases and hand searches were performed from February to May, 2017. Human cross-sectional and longitudinal studies that evaluated one or more of the following parameters were included: Probing Pocket Depth (PPD), Bleeding on Probing (BOP), Clinical Attachment Loss (CAL), Radiographic Bone Loss (RBL) or dental implant osseointegration failure rates. Three authors evaluated the articles and agreed upon inclusion/exclusion of the studies.

**Results:** Initial search retrieved 539 non-duplicated articles. Fourteen studies were selected after inclusion criteria were applied. All studies were performed in postmenopausal women. Mean PPD reduction ranged from 0.20–0.2 mm in HRT-positive patients; mean CAL gain –0.18 to 0.54 mm; mean RBL reduction –0.87 to 0.15 mm; and mean BOP reduction 9–30.3%. The number of lost implants increased 3.9–11.21% when HRT was used. Meta-analysis results showed no statistically significant differences between HRT-positive and negative women regarding PPD (weighted mean difference; CI 95%: –0.12; –0.29 to 0.06), CAL (–0.19; –0.46 to 0.09), RBL (0.36; –0.59 to 1.31) or number of lost implants (odds ratio 1.32; 0.7–2.51). BOP analysis could not be performed.

**Conclusion:** Current evidence shows no improvement in periodontal parameters - CAL, PPD and RBL - or osseointegration in postmenopausal women in use of HRT. BOP is possibly reduced, but meta-analysis could not be performed. To date, there is no evidence to support HRT in either men or women for periodontal/implant placement purposes.

**PD085**

The efficacy of chlorhexidine mouthwash, with and without an anti-discoloration-system (ADS), on the parameters plaque, gingivitis and tooth surface discoloration: a systematic review

B.W.M. Van Swaaij¹, D.E. Slot²

¹Nijmegen/Netherlands, ²Amsterdam/Netherlands

**Background & Aim:** Chlorhexidine digluconate(CHX) is currently recognized as the most effective mouthwash(MW) and is considered the gold standard agent in plaque control. In addition, it reduces signs of gingivitis. However one of its major side effects is extrinsic tooth staining of the teeth and oral mucosa. The aim of this systematic review was to determine, if an anti-discoloration system(ADS), added to CHX-mouthwash is effective in order to reduce the tooth surface discoloration. Additionally to evaluate whether CHX maintains its efficacy with respect to plaque and gingivitis.

**Methods:** MEDLINE-PubMed, EMBASE and Cochrane Central Register of Controlled Trials were searched up to October 2017 to identify eligible studies. The inclusion criteria were (randomized) controlled clinical trials conducted in human subjects in good general health. Papers evaluating the effect of a CHX-MW+ADS compared to CHX without ADS were included. From the selected studies, data were extracted, a descriptive analysis was performed and a meta-analysis(MA) when feasible.

**Results:** Independent screening of unique papers resulted in 11 eligible publications, presenting 14 comparisons. Eight evaluated the MW in a non-brushing model and six as an adjunct to brushing design. Descriptive analysis showed that the majority of the experiments had statistically significant benefit in favor of CHX-MW+ADS for stain scores. The majority also found no statistical differences on bleeding, gingival and plaque scores. This is supported by the MA. For non-brushing designs the difference of means(DiffM) for end plaque scores was ~0.00 (95% CI: [−0.25; 0.25], p = 0.98) and for the gingival index DiffM = 0.04 (95% CI: [−0.02; 0.11], p = 0.15). When a study design which included brushing was used the end plaque score was DiffM = 0.01 (95% CI: [−0.01; 0.02], p = 0.29) and for the gingival index DiffM = 0.00 (95% CI: [−0.05; 0.06], p = 0.87).

**Conclusion:** The addition of ADS to CHX-MW is in favour of its use regarding tooth surface discoloration and it does not affect its properties with respect to gingival inflammation and plaque scores. The recommendation emerging from this review is that in order to avoid tooth surface discoloration CHX-MW+ADS should be considered with respect to plaque and gingivitis reduction.

**PD086**

A qualitative feasibility study of diabetes risk assessment in primary dental care

S.M. Bissett¹, T. Rapley¹, J. Presseau², P.M. Preshaw³

¹Newcastle Upon Tyne/United Kingdom, ²Ottawa/Canada

**Background & Aim:** In the UK, approximately 4 million people have type 2 diabetes (T2D) with 0.5 million thought to have undiagnosed diabetes. The UK National Institute for Health