

Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.
The abstracts on this page have been chosen and edited by Reena Wadia.

Rubber cup or air polishing?

Fu J-H, Wong L B, Tong H-J, Sim Y-F. Conventional versus comprehensive dental prophylaxis: comparing the clinical outcomes between rubber cup and air polishing and the importance of plaque disclosure. *Quintessence Int* 2021; DOI: 10.3290/j.qi.a45602.

Air polishing exhibited better treatment efficiency.

This single-blind randomised controlled split-mouth study compared the clinical outcomes in dental prophylaxis between rubber cup polishing and an air polishing system using erythritol powder, with or without prior dental plaque disclosure. Healthy participants with full-mouth plaque score $\geq 60\%$ were recruited. Quadrants in each participant were randomly assigned to four groups: air polishing with prior plaque disclosure; air polishing without plaque disclosure; rubber cup polishing with prior plaque disclosure; or rubber cup polishing without plaque disclosure. Plaque scores, treatment time and post-treatment satisfaction were recorded. In total, 88 participants were recruited. Air polishing with prior plaque disclosure had significantly lower post-treatment marginal mean plaque score compared to air polishing or rubber cup polishing without prior plaque disclosure. Mean treatment time for air polishing was significantly shorter compared to rubber cup polishing. Both the participants and operators preferred air polishing over rubber cup polishing.

<https://doi.org/10.1038/s41415-021-2723-7>

SPT for dental implants

Gabay E, Cohen O, Horwitz J. Supportive periodontal therapy affects dental implants probing pocket depth, bleeding on probing, and bone level: a 4- to 8-year follow-up study. *Quintessence Int* 2021; DOI: 10.3290/j.qi.b912663.

SPT has a significant positive effect on PPD, BOP, and on implant bone levels and should be an essential part of implant therapy.

This study evaluated the implant and patient characteristics after implant installation in a study involving immediate fixed restoration of dental implants for patients treated for generalised chronic periodontitis. The patients were examined clinically and radiographically at implant placement, 6 months, 1 year, and 4 to 8 years later. Supportive periodontal therapy (SPT), teeth and implant probing pocket depth (TPPD and IPPD), bleeding on probing (BOP [teeth, TBOP; implant, IBOP]), and bone level (BL) measurements around implants were documented. Cases were divided into three groups according to annual SPT rate: 0.00 to 0.99/year (SPT0), 1.00 to 1.99/year (SPT1), 2.00 or more/year (SPT2). Twelve patients, with 26 implants were included. A weak negative correlation was found between SPT rate and Δ TPPD, whereas a strong negative correlation was found between SPT rate and Δ IPPD. Negative correlations were found between SPT rate and Δ TBOP, and between SPT rate and Δ IBOP. A moderate correlation was found between SPT rate and Δ BL.

<https://doi.org/10.1038/s41415-021-2742-4>

UKCAT scores vs performance

Greatrix R, Nicholson S, Anderson S. Does the UKCAT predict performance in medical and dental school? A systematic review. *BMJ Open* 2021; DOI: 10.1136/bmjopen-2020-040128.

The relationship is generally weak, although noticeably stronger for the UKCAT total score and the verbal reasoning subtest.

This systematic review summarises the literature exploring the relationship between performance in the UKCAT and assessments in undergraduate medical and dental training. Studies which included the predictive validity of selection criteria including some element of the UKCAT were considered. Twenty-two papers were included. Four studies described outcomes from dental programmes with limited results reported. Eighteen studies reported on relationships between the UKCAT and performance in undergraduate medical training. Of these, 15 studies reported relationships between the UKCAT cognitive tests and undergraduate medical assessments. Weak relationships were observed in 14 of these studies; four studies reported some moderate relationships. The strongest relationships with performance in medical school were observed for the UKCAT total score and the verbal reasoning subtest.

<https://doi.org/10.1038/s41415-021-2743-3>

Integrated healthcare – perio & diabetes

Valentim F B, Carneiro V C, da Costa Gomes P, Rosetti E P. The importance of integrated healthcare in the association between oral health and awareness of periodontitis and diabetes in type 2 diabetics. *Oral Health Prev Dent* 2021; **19**: 1–6.

Vast majority of participants were previously treated for periodontitis without receiving proper oral health education.

The aims of this study were to assess the association of various factors with type 2 diabetics' awareness of periodontitis. Two hundred and eighty-eight type 2 diabetics were evaluated through a validated structured questionnaire. The average age of participants was 62 years, 82% were previously treated for periodontitis and 70% have never received information on periodontitis and its relationship with diabetes. A higher chance of participants having previously received information regarding periodontitis was associated with more than 8 years of schooling, daily flossing habit, presence of periodontitis and prior treatment for periodontitis. Regarding previously received information about periodontitis/diabetes relationship, significant associations were observed for more than 12 years of schooling and diabetes diagnosed more than 8 years ago. The vast majority of participants were previously treated for periodontitis without receiving proper oral health education.

<https://doi.org/10.1038/s41415-021-2744-2>