RESEARCH INSIGHTS

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**.

Vaping and caries risk

Irusa K F, Finkelman M, Magnuson B, Donovan T, Eisen S E. A comparison of the caries risk between patients who use vapes or electronic cigarettes and those who do not: A cross-sectional study. *J Am Dent Assoc* 2022; **153**: 1179–1183.

E-cigarettes may increase a patient's caries risk level.

This study assessed the association between e-cigarette or vape use and caries risk level. A cross-sectional study of patient records was conducted; 13,098 patients who attended the dental school clinics from January 2019, through January 2022, were included. Data from 13,216 patients were included in the data set initially; 99.3% responded 'no' when asked whether they used e-cigarettes or vapes, and 0.69% responded 'yes'. There was a statistically significant difference in caries risk levels between the e-cigarette or vape group and the control group; 14.5%, 25.9%, and 59.6% of the control group were in the low, moderate, and high caries risk categories, respectively, and 6.6%, 14.3%, and 79.1% of the e-cigarette or vape group were in the low, moderate, and high caries risk categories, respectively. In this population, vaping patients had a higher risk of developing caries.

https://doi.org/10.1038/s41415-022-5365-5

E-cigarette promotion on social media

Smith M J, Hilton S. Adolescents' views on user-generated content and influencer marketing of e-cigarettes on social media: a focus group study. *Lancet* 2022; **400 Suppl 1:** S77.

Given the high level of pre-adolescents' and adolescents' engagement with social media, these findings provide worrying evidence that e-cigarettes are attractive to this population group.

Twenty focus groups were conducted in 2022, with 82 pre-adolescents and adolescents aged 11-16 years living in Scotland. Participants were asked about smoking and vaping behaviours, social media use, vaping advertisement exposure, and were shown illustrative examples of typical social media content, which were used to stimulate discussion. Participants mentioned seeing e-cigarette advertising mostly through social media platforms, such as Instagram and TikTok. Youths agreed that e-cigarettes portrayed on social media were often glamourised as being 'cool', enticing by social media influencers, and viewed as a modern lifestyle accessory. Participants typically viewed e-cigarettes as less harmful than traditional cigarettes, but also expressed concerns about the scarcity of health and age warnings on social media. Participants stated that the adverts were branded to target their age group and that the e-cigarette flavourings encouraged youths to want to try the products. The authors suggest the need for policies to restrict the marketing of e-cigarettes on social media.

https://doi.org/10.1038/s41415-022-5367-3

Smoking and periodontal therapy

Leite F R M, López R, Pajaniaye J B, Nascimento G G. Effect of Smoking Exposure on Nonsurgical Periodontal Therapy: 1-Year Follow-up. *J Dent Res* 2022; DOI: 10.1177/00220345221135100. Online ahead of print.

Smoking cessation should be a critical part of periodontal therapy.

This study investigated the influence of smoking on periodontal healing for 12 months after non-surgical periodontal therapy and supportive periodontal care every third month. Eighty smokers willing to quit smoking and with periodontitis were included. Participants were offered individualised smoking cessation. Data collection included questionnaires and periodontal examination. Three smoking patterns were identified: light smokers/quitters (n = 46), moderate smokers (n = 17), and heavy smokers (n = 17). Heavy smokers commenced with a higher average clinical attachment level of 1.1 mm and ten more sites with severe periodontitis than light smokers/quitters. While light smokers/quitters and moderate smokers obtained an average improvement of 0.6 mm periodontal pocket depths and 0.7 mm CAL, respectively, heavy smokers experienced 0.5 mm attachment loss. Heavy smokers had only a 50% reduction in the number of sites with moderate periodontitis when compared with light smokers/ quitters and moderate smokers. While most benefited from non-surgical periodontal therapy with results affected in a dose-response manner, the therapy had no effect on severe periodontitis among heavy smokers.

https://doi.org/10.1038/s41415-022-5366-4

Furcation involvement – what's the risk of tooth loss?

Trullenque-Eriksson A, Tomasi C, Petzold M, Berglundh T, Derks J. Furcation involvement and tooth loss - A registry-based retrospective cohort study. *J Clin Periodontol* 2022; DOI: 10.1111/jcpe.13754. Online ahead of print.

Furcation status had a clinically relevant impact on the risk for molar loss. Following first detection of deep furcation involvement, the decline in molar survival was minor.

This retrospective cohort study evaluated the impact of furcation status on the risk for molar loss. Subjects with and without furcation involvement (FI) in 2010/11 were identified in a nationwide registry in Sweden (381,450 subjects; 2,374,883 molars). Data on dental and periodontal status were extracted for the subsequent ten-year period. Impact of FI (at baseline or follow-up) on molar loss/extraction was evaluated through multilevel logistic regression and survival analyses. FI had a significant impact on molar loss. FI degree 2 and 3 resulted in adjusted risk ratios of 1.67 and 3.30, respectively. Following first detection of deep FI (degree 2–3), estimated survival decreased by 4% at five years and 8% at ten years. In addition to FI, endodontic status and probing depth were relevant risk factors for molar loss.

https://doi.org/10.1038/s41415-022-5368-2