

Editorial

Some factors that may affect your choice of appliance

In the lead article Luke Chapman, Mark Coreil, Paul Armbruster and Joanna Du evaluate the shear bond strengths of different molar bonding pads with different adhesives. They report that choosing the right combination of pad design and adhesive may lead to savings in clinical time.

In a large epidemiological study of Iranian adolescents Seyed Safavi, Aliakbar Sefidroodi, Mahtab Nouri, Ladan Eslamian, Sanam Kheirieh and Alireza Bagheban report that 20 per cent of the sample needed orthodontic treatment. Crowding, in the form of impeded eruption and contact point displacements, was the most common deviation in the adolescents who had not been treated.

Steven Jones, Godwin Cheuk, George Georgiou and David Moles continue their search for a suitable substitute to human enamel for bond strength studies. In this study they report that fluoridated apatites fell short of being a suitable substitute to human enamel so the search continues. We are confident that Steven Jones and his team will eventually crack this problem.

Resin tags are not the most likely cause of staining around bonded attachments according to Arezoo Jahanbin, Hamideh Ameri and Rokhsareh Khaleghimoghaddam. Interestingly, the colour differences were unlikely to be picked up by the majority of observers.

Soft tissues changes following various forms of orthodontic treatment may be confounded by growth and/or developmental changes. Viral Kachiwala, Anmol Kalha and Genevive Machado were in the fortunate position of finding a group of women with bimaxillary dentoalveolar protrusion treated with first premolar extractions. The malocclusion is relatively common in South India and their findings will interest clinicians.

The notion that more nickel ions might be released from NiTi wires after sterilisation was investigated by Maryam Poosti, Hossein Rad, Kamyar Kianoush and Behzad Hadizadeh. Fortunately, sterilisation did not affect the concentrations of nickel ions released into artificial saliva, and one method of sterilisation may have slightly improved the resistance of NiTi archwires to corrosion.

Antonio Gracco, Alida Mazzoli, Orlando Favoni, Carla Conti, Paolo Ferraris, Giorgio Tosi and Maria Paolo Guarneri use advanced methods to investigate the optical, morphological and chemical changes in Invisalign appliances over 14 days. They point out that further in vivo tests are necessary to confirm the chemical stability of the appliances.

The reproducibility and validity of measurements made on virtual study models were investigated by Mahtab Nouri, Reza Massudi, Alireza Bagheban, Somayyeh Azimi and Farzad Fereidooni. They developed the laser scanner and software used in this study and their approaches to the problems of reproducibility and validity are worth careful reading.

Eden Lau, Wayne Sampson, Grant Townsend and Toby Hughes team up to report on growth rotations in patients with Angle Class II division 1 malocclusion treated with the Clark twin blocks in a specialist practice setting. Their study will dispel some of the misconceptions of the role of growth rotations in Class II treatment.

The reliability of the magnification method for localisation of palatally placed canines is investigated by Paul Chalakal, Abi Thomas and Saroj Chopra. They report the sensitivity and specificity of the method, and although it has an accuracy of 87 per cent, additional radiographs may be necessary.

In this issue we have an extensive review on micro-biologically-influenced corrosion of orthodontic alloys by Konstantina Papadopoulou and Ted Eliades. This topic will be new to some readers and possibly outside their comfort zones, but as long as brackets with components made from different alloys are with us, corrosion may exist. They suggest some simple measures that may reduce intra-oral corrosion.

This issue concludes with an excellent report by Jadbinder Seehra, Padhraig Fleming and Andrew DiBiase of two cases with gingival recession associated with anterior crossbites. The authors remind us that there is a place for relatively simple interceptive treatment.

Michael Harkness