

Editorial

Effective orthodontics

This issue is one of the largest so far and covers a wide range of topics from bonding (and debonding) to lip – tooth relationships during smiling and speech to forces and moments with reverse curve NiTi archwires. It opens with a randomised clinical trial of the utility of custom bases for indirect bonding by Peter Miles. Peter's interesting study has important information for the increasing number of clinicians who use indirect bonding.

Exogenous opioids reduce macroscopic tooth movement in rats, according to Drs Akhoundi, Dehpour, Rashidpour, Alaeddini, Kharazifard and Noroozi. They suggest that opiate-based analgesics, which are readily available and may be used by patients for pain relief, may do the same in humans.

Chromatic adhesives are an attractive proposition because they aid flash clean-up. June Lee, George Georgiou and Steven Jones report there were no differences in the unfatigued and fatigued bond strengths of chromatic and light-cured adhesives, but urge caution before their results are confirmed by clinical tests.

The intrusive forces exerted on the upper incisors by NiTi reverse curve archwires are very high regardless of the type of bracket, according to Drs Sifakakis, Pandis, Makou, Eliades and Bourauel. Lighter archwires may be more effective than the NiTi archwire they used and, presumably, result in less tissue damage.

Debonding ceramic brackets can be a stressful procedure, particularly if ceramic remnants are left behind or the enamel fractures. Drs Lemke, Xu, Hagan, Armbruster and Ballard compared the bond strengths and modes of failure of ceramic and metal brackets and their findings will be of interest to clinicians using ceramic brackets.

Drs Ghoneima, Abdel-Fattah, Eraso, Fardo, Kula and Hartsfield used CT imaging to investigate the skeletal and dental changes during rapid maxillary expansion. They consider 3-D volumetric reconstruction gives a better evaluation of treatment outcomes than traditional radiographic methods.

In their study of glass ionomer cements, Drs Dastjerdie, Zarnegar, Behnaz and Seifi tell us that the cements contributed little to band retention, and

imply that well-adapted bands are the key to good retention.

Many orthodontists (and professional associations) use the word 'smile' in their literature. Roozbeh Rashed and Farzin Heravi look at the impact of various types of malocclusion on lip – tooth relationships during smiling and speech. They suggest that dynamic records during smiling and speech should be part of our diagnosis and treatment planning and have designed a software programme to facilitate these.

Many clinicians will agree that extraction of lower second premolars provides more space for unerupted third molars than extraction of the first premolars, but is it sufficient to allow the lower third molars to erupt into the arch? Drs Celikoglu, Kamak, Akkas and Oktay give us data of the actual space gained and the extent of third molar uprighting following either premolar extractions or nonextraction treatment.

Drs Ebin, Zam and Othman tell us Malay children with repaired unilateral cleft lip and palate have normal mandibles, but retrusive maxillae. They postulate that pressure from the repaired lip may be responsible for the retrusive maxillae and retroclined incisors.

In this latest investigation of facemask therapy, Dr Gu identifies the craniofacial features contributing to long-term stability of this type of treatment. Dr Gu also calls for a multicentre study to improve the predictive power of the discriminant model.

A few days of rapid maxillary expansion followed by a period of slow opening has the same effects on the facial skeleton as rapid maxillary expansion alone, according to Drs Kilic and Oktay. The sagittal and vertical changes were small and variable and may not be clinically significant, according to Nihat Kilic and Hüsamettin Oktay.

Somewhat surprisingly, buccal tubes with large bonding pads had lower shear bond strengths than tubes with small bonding pads. Drs Purmal and Sukumaran think the periphery of the large pads may have 'flexed' during debonding, leading to early dislodgement. If they are correct, a design change should improve the retention of bonded buccal tubes.

The Clark twin block is the appliance of choice for many Class II division 1 malocclusions. Catherine

O'Shea, Andrew Quick, Gillian Johnson, Allan Carman and Peter Herbison combine to analyse mandibular motion in this case report, and tell us that appliance-induced changes in condylar trajectories may be temporary.

In this case report Drs Trakyalı, Çıldır and Sandallı describe their treatment of a lower transmigrated canine. They used a combination of forced eruption and orthodontic treatment and obtained an excellent result.

Drs Jamilian and Showkatbakhsh describe their non-surgical treatment of a young girl with mandibular deviation. The case was beautifully treated and Abdolreza Jamilian and Rahman Showkatbakhsh point out the advantage of combining a bite plane with the fixed appliances.

Associate Professor Craig Dreyer will take over editorship of the Journal in January 2011. Craig is a senior staff member in orthodontics, the Assistant Dean of Clinical Services at the University of Adelaide and has been acting-Dean on several occasions. He has been Chairman of the Appeals Committee of the Australian Society of Orthodontists for many years, which speaks highly of the Society's confidence in his fairness and dedication. Many of you know him through his excellent reviews for the Recent publication section of the Journal, his publications on tissue reactions and excellent chapters in recent orthodontic textbooks. He is an experienced editor having supervised many theses from honours to doctorate level. A/Prof Dreyer has been invited to speak at many universities and conferences: most recently as a keynote speaker at the World Federation of Orthodontists' Conference in Sydney. He has also used his skills and extensive knowledge of orthodontics to teach postgraduate students at Khon Kaen University, to review articles for numerous journals, to provide curriculum advice for the Bachelor of Oral Health programme at the University of Adelaide and coordinate the Fourth year undergraduate programme at the University. As external examiners our paths have crossed and the postgraduate students he examined spoke highly of his knowledge and fairness. I am confident you will find him an excellent editor for the Journal.

Finally, I would like to thank those who have contributed to the Journal and supported me during my term as editor.

Michael Harkness

Retirement of Michael Harkness

Aimee deCathelineau, as current senior editor of the *Journal of Cell Biology*, recently said, '... when you read 100 papers you find out what a journal is really about ...'. When you read 100 papers from the *Australian Orthodontic Journal*, you gain the impression that the Journal is about, well, orthodontics. What Aimee deCathelineau has inferred is that an editor has a crucial role in determining the nature of a journal and the emphasis and the direction that editorial content and manuscripts should take. Writing in *Nature*, Kendall Powell¹ described an editor's role as the 'Gatekeeper's burden', as submitted papers are chaperoned through the peer-review and editorial processes and, ultimately, in deciding whether a paper is published.

Over almost a decade, Michael Harkness has been the shepherd of our Journal and the overseer of its development. A glance at the last issue published in May 2010 reveals the extent of his contribution. In it there are articles on growth and development, orthodontic materials, therapy, treatment planning, prevention and more. The direction that the Journal has taken has been topical, relevant and of intense interest to the readership. The responsibilities of liaising with authors, chasing referees and the editing of manuscripts can seem a never-ending task. Like his predecessors, Michael has dedicated considerable time, untiring effort and remarkable expertise to the publication of a journal that is increasing in its academic value and its popularity. His strong and broadly-based foundation in science has been applied to the Journal's content. His creative and imaginative view of orthodontics and its future prospects has enabled the Journal to grow under his leadership, whilst maintaining a historical perspective of the profession. The Journal's readership has basked in an intellectual atmosphere sustained by Michael's honesty and integrity in all aspects of the editing and publishing process.

Upon his retirement as editor, Michael Harkness leaves a legacy of service and dedication to the Journal for which the Australian Society of Orthodontists is proud and thankful. Its continued success has been because of his devotion. The Society wishes Michael a happy and long 'retirement', doing the things that he, heretofore, has been unable to do. Best wishes and thank you from a grateful Society.

Craig Dreyer, on behalf of the Journal readership

Reference

1. Powell K. Gatekeepers burden, *Nature* 2010;464:800–1.