

Editorial

Evidence from all sources

The complexities of frictional behaviour and wear of orthodontic archwires fretting against alumina are reported in two excellent papers by Abdenacer Berradja, Guy Willems and Jean-Paul Celis. It appears all wires are not equal when it comes to frictional resistance in solutions: surface roughness of ceramic brackets is only part of the story and changes at the wire-bracket interface play an important part in determining frictional resistance and wear. Dissolution of NiTi wires is worth following up as these wires are used extensively in orthodontics and often in situations when fretting can occur. According to one source the nickel sensitive patient may not present an extreme medical risk,¹ but it is something we should be aware of in light of the increasing number of adolescents with nickel-plated ear, lip and/or eyebrow piercings.

In this issue we have two papers covering topics that are less popular today than they were some years ago. I am referring to the papers by the Adelaide team of Sabin Ranjitkar, Ni-Hung Lin, Ross Macdonald, Toby Hughes, Jane Taylor and Grant Townsend on the secular changes in height and skeletal maturation and new height and skeletal age standards for Australian children. These topics are important because they provide us with a practical means of estimating the onset of the adolescent growth spurt for timing orthodontic treatment, inform us when craniofacial growth has ceased in orthognathic surgery patients and, with additional information, give us insights into the complex, but variable, relationships between skeletal maturation, malocclusion, tooth emergence and facial form.²⁻⁶ The authors give us standards for early and late maturers, but unfortunately do not give us velocity curves. Perhaps these will follow?

Jim Bokas and Michael Woods compare the rates of canine retraction and anchorage loss with NiTi coil springs and elastomeric chain. It is a well-designed study and they report that the mean difference between the two methods was slightly in favour of the coil springs and there was less variation when chain was used. Their conclusion that rates of space closure by both methods are likely to be similar will suit most, if not all, of us.

In a second paper Jim Bokas and Tony Collett examine changes in the position of the upper lip in a group of Class II division 1 patients following extraction of upper premolars only. They point out that changes in the position of the upper lip were remarkably small even in a subgroup with severe overjets. In the light of their results claims that upper premolar extractions flatten the facial profile cannot be supported.

Bonding to amalgam surfaces can be a frustrating procedure and, I confess, I generally use a band. Jonathan Skilton, Martin Tyas and Michael Woods determine the shear bond strengths of sandblasted, diamond bur roughened and polished amalgam surfaces using different bonding agents, and tell us that a diamond bur roughened amalgam surface is a poor substitute for a sandblasted surface. Although there were large differences between diamond bur and sandblasted surfaces an intermediate primer may help.

In this issue James Ackerman, Martin Kean and Marc Ackerman comment on 'Evidence-bolstered orthodontics'. Many orthodontists will agree with their view that the soundest mode of practice today is reflective, experienced evidence-bolstered orthodontics. We also have a thoughtful comment from Hussam Abdel Kader on the problems of a global model of facial attractiveness and beauty. He draws on his extensive clinical experience and has some useful advice for us all.

Michael Harkness

References

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