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Filling the vacuum

Sir, in response to correspondence on GDP-delivered orthodontics, I fully agree that orthodontic treatment needs '*The right person, doing the right thing, for the right patient'*. But instead of castigating GDPs for undertaking orthodontics, maybe we should be asking why this situation has occurred? And what is the solution? In the early 2000s orthodontic undergraduate education was vibrant and engaged students in learning the necessary clinical skills.[1] In addition, many consultants in the hospital orthodontic services ran 'extended attachments' which gave the opportunity for GDPs to learn orthodontics in a supportive educational environment. In the past ten years the amount of undergraduate orthodontic teaching has been reduced by the GDC undergraduate educational 'outcomes' in combination with pressures on dental schools. This has been compounded by VT and DF1 trainees having less orthodontic education than ever before. These opportunities have now fallen into the realms of history particularly with the increased access to primary care orthodontic specialists. Consequently, it is not surprising that GDPs can be easily mislaid by wild non evidence-based claims, more about advertising than dental science. The short term orthodontics (STO)/fast brace courses have arisen to fill that vacuum, and hence the marketing men have become involved.

We hear hyperbolic claims about 'fast braces' delivering 'fast (or STO)', although unfortunately osteoclasts and osteotblasts have not read the accompanying publicity. Any orthodontic appliance can deliver a quick fix as long as the problem is minor with small tooth movement required or the treatment plan accepts a compromise involving minor tooth movements. However, it is wrong to say these treatments are always inappropriate. Providing that the dentist and patient understand the compromises, limitations and informed consent obtained, and the need for lifelong retention (required with all forms of orthodontics), then that may be an acceptable treatment for a particular patient.

However, to achieve '*The right person...*' approach requires orthodontic education now missing from undergraduate and immediate postgraduate education curricula. Thankfully a few enlightened orthodontic specialists are now working to educate GDPs in the necessary skills eg IAS Academy (I am the Training Director); Derrick Wilmot; Jonathon Sandler/Straight Forward, Straight Wire. Demand for orthodontics is increasing and without proper orthodontic education more GDPs will find that orthodontics is not just a quick fix.

R. S. Hobson,
by email

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PHARMACEUTICALS

Private prescription

Sir, with new medications being constantly licensed and prescribed for patients, I was delighted to read the paper on dabigatran (*BDJ* 2014; **217:** 623–626). The post-operative measures to minimise the risk of haemorrhage for these patients following routine extractions in general dental practice are logical. However, I would like to highlight to readers that tranexamic acid is not part of the Dental Practitioners' Formulary and patients would require a private prescription from general dental practitioners.

C. G. Warner,
by email

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PERIODONTOLOGY

A vaccine for periodontopathogens

Sir, we were delighted by the paper by Cerajewska *et al.*,[1] which matches exactly our point of view presented briefly previously in this Journal[2] describing the potential role of periopathogens in the development of cognitive impairment among elderly people.

The most recent, and perhaps the most methodologically sophisticated study[3] published in *PLOS One* elucidated how IgG immunoglobulins response levels to common periodontal microbiota are associated with risk for developing incident of Alzheimer disease (AD) and play a role as a predictor of AD. This longitudinal research implemented the Washington Heights-Inwood Columbia Aging Project, a case-cohort study including 110 individuals with an incident of AD, northern Manhattan residents aged >65 years.

For the first time the analysis included a vast majority of causative periopathogens (seven genospecies) responsible for common inflammatory conditions of periodontal tissues. However, the serum level of antibodies to periopathogens alone may not reflect sufficiently the multidirectional interactions between infected periodontium and host response, potentially leading to AD. Therefore, further validation is required.

However, the newest publication[4] (January 2015) gives the results of a retrospective analysis of a 37-year cohort study in Sweden, and does not indicate that decreased numbers of teeth were associated with dementia. Although, it is well-known that tooth loss is likely to be caused by advanced periodontitis, there are numerous other potential causes of reduced dentition. Hence, an association between periodontitis and Alzheimer disease cannot be reasonably concluded from such studies as stated in the article provided by Cerajewska.[1] Undoubtedly, a local chronic inflammation may trigger a systemic inflammatory host response within different parts of the human body (brain, heart, vessels, joints).

Interestingly, the project of Birmingham Community Healthcare NHS Trust 'Outcomes of periodontal therapy in rheumatoid arthritis'[5] explores the hypothesis that periodontal therapy aimed at eliminating gum infection can reduce joint and systemic inflammation in patients with rheumatoid arthritis.

The development of a novel vaccine for periodontopathogens, but not against single species alone, would be a great achievement contributing significantly to preventative strategies of systemic illnesses and public health.

A. Dziedzic, R. D. Wojtyczka,
by email

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