Letters to the Editor

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Priority will be given to letters less than 500 words long.
Authors must sign the letter, which may be edited for reasons of space.

AESTHETIC DEVIATION

Sir, I would like to join the discussion regarding the golden proportions in dental aesthetics.

I pay my respects to Dr E. Levin and also thank Dr A. Astakhov for his overview of golden proportion coefficients (*BDJ* 2008; **204:** 419-420 and *BDJ* 2008; **205:** 61, 637). It is hard to disagree with Dr Levin that perfect symmetry is very rare in nature. However, it can be observed through clinical practice that teeth forming a pair have exactly the same width. Moreover, the correlation of central incisors to lateral incisors in the dental arch is standard and the majority of people have teeth of standard width. Therefore, the natural asymmetry of the dental arch is due not to differences in the width of symmetrical teeth but rather to their positioning in the dental arch.

Ultimately, mathematics is the root of aesthetics. Therefore, employing ideal proportions will always help to improve the accuracy of a clinical assessment and management.

The method of dental arch calculation, to which there are no written references in English, uses ideal coefficients of the ratio of the front teeth widths. It can be used in addition to Dr Levin's method of visually assessing the correlation of the front teeth in the dental arch to the golden proportion.

My method is based on the coefficients of the correlation of the front teeth to each other. The coefficients are not the golden proportions themselves because golden proportions only work when you look at the patient face-on. These coefficients, on the other hand, can be used by the dentist in the working position with the help of a gauge. The working position does not allow the dentist to control the proportionality of teeth to each other. However, the coefficients allow the dentist to plan and build the front teeth such that once the work is finished, the teeth will be in line with the golden proportions when the patient is viewed face-on.

A human eye is inclined to optical illusions. One can perceive objects and spaces in different ways. A dental gauge permits measurements to an accuracy of up to 0.1 mm, which is the minimum for controlling teeth symmetry and proportionality. This easily compensates for optical illusions and makes inevitable mistakes in the dentist's work invisible to everyone.

For the upper jaw the ideal proportion for the central, lateral incisors and canines is 1.3 : 1.0 : 1.15. For the lower jaw the proportion for the central, lateral incisors and canines is 1.0 : 1.1 : 1.4. Using these coefficients one can:

- Check the proportionality and symmetry
- Identify a probable reason for disproportion and asymmetry
- Reconstruct the dental arch in symmetry and in golden proportions.

In Figure 1, the arch length between the canines is 29.9 mm. It is completely sufficient for standard incisor widths (8.5 mm and 6.5 mm). The space excess is divided proportionally between four incisors with a 1.3 coefficient.

In Figure 2, the length of the front part of the dental arch is 3.8 mm shorter then the standard, while the incisors have standard widths (5.5 mm and 5.0 mm). The space deficiency is compensated by 0.5 mm on each canine and 2.0 mm on all incisors with a 1.1 coefficient. Now all incisors have a compromised width, but are proportional as between each other.

Finally, when performing a restoration in a direct technique even with the ideal coefficients one will always still have some aesthetic deviation.

S. Radlinskiy

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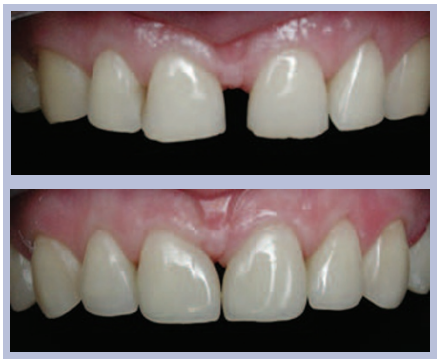

Fig. 1 Reconstruction of the upper front teeth with a 1.8 mm diastema

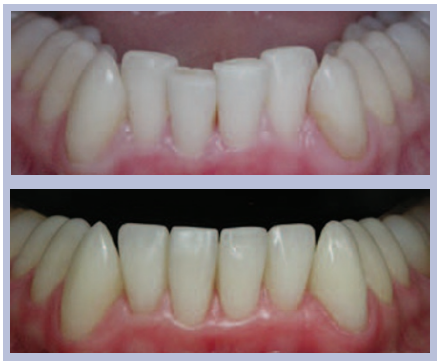

Fig. 2 Reconstruction of the lower front teeth with crowding

GREAT CAUTION

Sir, regarding the letter *Fabricated illness* (*BDJ* 2009; **206:** 239) we agree with much of what the author says. However, professionals commonly make the mistake of believing they must diagnose non-accidental injury whereas in fact

their role is much more straightforward. When assessing a child's injury healthcare professionals should raise the alarm where the history of events does not match the clinical presentation or where there is a delay in presentation to services. In addition the author refers to factitious disorder but then goes on to describe factitious disorder by proxy. Factitious disorder by proxy is the intentional production or feigning of physical or psychological signs or symptoms in another person who is under the individual's care. Factitious disorder by proxy has yet to be recognised as an official separate category in the *DSM-IV*. Appendix B of the *DSM-IV* lists the following research criteria for factitious disorder by proxy:

- The motivation for the perpetrator's behaviour is to assume the sick role by proxy
- External incentives for the behaviour (such as economic gain) are absent
- The behaviour is not better accounted for by another mental disorder.

Symptoms should be attributed to this diagnosis with great caution and only in consultation with child psychiatry and paediatric colleagues.

K. Nisar
By email
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DEFINING PROFESSIONALISM

Sir, I was fascinated to read the numerous ideas proposed by the authors in the article *Dental professionalism: definitions and debate* (*BDJ* 2009; **206:** 249-253). My compact *Oxford English Dictionary* defines professionalism as: 'the qualities or typical features of a profession or of professionals, esp. competence, skill etc.'

In the original BDA Articles of Association in 1880, the third paragraph states: 'the objects for which the Association is established are the promotion of dental and allied sciences and the maintenence of honour and the interests of the dental profession by the aid of all of the following...' followed by seven further paragraphs. Interestingly the sixth was '(f) The encouragement of the Dental Benevolent Fund for the relief of decayed or necessitous members of the profession'.

In 1998 when the Representative Board wanted a 'Mission Statement' for our Association, members had forgotten about our Heraldic Coat of Arms granted by Warrant of the Earl Marshal of the College of Arms on 11 April 1930, which reads *'Ars Scientia Mores'*, and which means to typify the three great objects of the British Dental Association, namely, the promotion of dental art, dental science and of dental ethics. Fortunately they were persuaded to include our motto in the second paragraph!

Where is the emphasis of competence and technical skill in dentistry in the article? Patients trust us to perform highly complicated procedures in a very sensitive part of their body (has he or she got good hands?).

Compassion can lead to emotional involvement which can cause poor dental judgement and further lead to mental health problems for the dentist.

Empathy is a more powerful, objective word, and coupled with altruism covers relationships with patients, staff and colleagues. To summarise a compact description of professionalism:

- Dentists will exercise due diligence, competence and skill
- Develop their dental art, dental science and dental ethics
- Have empathy and altruism with their patients, staff and colleagues.

Political and business inferences should not be part of our professionalism!

C. Wilks
Billesdon
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DCP LET DOWN

Sir, I am a dual qualified dental hygienist and dental therapist practising for five years in both the NHS and private dentistry. Previously I was a qualified dental nurse and dental sedation nurse. However, I do not feel that the future looks bright for dental hygienists and therapists.

I have been made redundant twice as a result of the new NHS contract in England. The practices informed me that in reviewing their businesses as a result of the contract they had concluded that hygienists/therapists were no longer cost effective in NHS practice. In one case I was offered alternative employment as a dental nurse, which added insult to injury. The new contract has essentially made hygienists and therapists redundant in the NHS sector of dentistry in England and Wales. Several of my colleagues also found themselves in a similar position at the time.

I then moved to Scotland, where the old NHS contract is still in place and where I was promised a full-time job in Glasgow. I had been at this practice for five months when my employer decided to go on annual leave for two months during which time there was no other dentist at the practice to whom to refer patients and I was given my notice, being replaced by an associate dentist after I had worked my notice. In the Glasgow practice where I am now based and have been employed full-time for 11 months, I have been told that my hours are to be reduced to part-time as one of the owner's practices was running at a loss and that the dental hygiene book wasn't busy enough.

Having sent out over 90 CVs to local dental practices it soon became apparent that there was no full-time work available and there was very little demand for hygienists or therapists. I was forced to go self-employed and found myself working part-time in a mixed NHS/private practice, however, a similar story ensued and the owner decided to employ a dentist instead.

Since qualification, on average I find myself sending out my CVs every six months to find permanent work. The new NHS contract has rendered hygienists and therapists redundant in the NHS in England and Wales.

There seems very little demand for dental hygienists and none whatsoever for dental therapists with many dentists unaware of what the latter can do, most favouring an associate dentist instead. In my experience the vast majority of dentists treat hygienists and therapists like second rate citizens and there is certainly no job security for those of us lucky enough to find sessions in a practice. I don't believe this is because of the current economic climate.

I am currently self-employed working part-time in three practices and unable to find full-time work. I work only as a hygienist as this is what most

practices seem to want. I am not provided with a nurse, which seems common within the profession. I spend most of my time and money commuting between these practices and chasing up pay cheques at the end of every month. Consequently, I have decided to throw in the towel, and consider other career options as I feel let down by the dental profession.

C. H. Griffiths
Glasgow

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EQUIPPED FOR EMERGENCIES

Sir, we read with interest the article by Pigadas *et al.* (*BDJ* 2009; **206:** 67-68). The authors report the management of a potentially fatal sublingual haematoma secondary to dental implant placement. We have also been concerned about this issue and believe that it is not taken seriously enough by those providing implant training. Our own search of the literature revealed at least 20 similar reports.[1-17] It seems likely therefore that there are very many more cases which remain unreported. The authors rightly comment, 'practitioners involved in implant placement should be trained and well equipped in their practice environment to deal with such emergencies'. Kalpidis and Setayash,[18] who are cited by the authors, suggest crisis management guidelines. They draw attention to the fact that once a haematoma has become established, intubation becomes considerably more difficult. They advise early intubation as a preventive measure and report cases where, 'unsuccessful attempts for intubation after the establishment of the hematoma resulted in the need for emergency tracheostomies'. Indeed this was the result in the case reported by Pigadas *et al.*

Despite potentially fatal consequences, we wonder how many dentists who provide implant surgery in their practices are either trained or equipped to carry out such emergency care. As practitioners we are required to undertake annual training for the relatively rare event that a patient has a coronary arrest in practice. We suggest that if a practitioner is carrying out implant surgery on a regular basis then the likelihood of having to manage a sublingual haematoma is very much greater than that of having to manage a cardiac arrest. However, the training to manage such an emergency, let alone the requirement to complete it, does not seem to exist.

The authors also draw attention to the requirement for preoperative imaging and recommend, 'imaging techniques that assess the mandibular anatomy in a sagittal plane such as lateral cephalometric radiographs and computed tomograms'. We recently described a simple technique, using materials already available in most dental practices, which produces cross sectional images of the anterior mandible.[19] However, whilst appropriate preoperative imaging reduces the likelihood of a lingual perforation, the risk of a life threatening haematoma remains. Therefore it seems self evident that dentists who place implants must be equipped and trained to manage such a situation. At the very least there must surely be a written protocol in each practice and regular rehearsals with staff. Currently available implant training may rightly stress the dangers of lingual perforation in the mandible or cover preventive strategies. However, we are not aware of courses that provide training in the handling of such an emergency. Unfortunately it seems that Pigadas *et al.* may be recommending training that is not available.

A. Shelley, K. Horner, R. Oliver
Manchester

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A FAIR PROCESS

Sir, we were very interested to read Dr Hobson's Opinion article (*Challenges to future dental education*; *BDJ* 2009; **206:** 125-126). We shall let our fellow dental admissions tutors take issue with his comment, '..the dental undergraduate recruitment process is at best a lottery, and at worst can be described as restrictive.' Dr Hobson is of course entitled to his opinion.

We must however correct his comments regarding UKCAT. It is not based on a medical model. As Chair of the Test Development Group of UKCAT (LC) and the Dental Schools Council UKCAT Board Representative (BC), we can confirm that dentistry has always been a full and equal partner in the Test's development.

UKCAT is a test of aptitude. It is simply another instrument available to the admissions tutor to help in the selection process and ensure that the process is fair and not a 'lottery.'

Research programmes are underway to determine its predictive validity in both dentistry and medicine.

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B. Chadwick
Cardiff

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NURSE REGISTRATION

Sir, I have recently learnt that there are problems arising with dental nurses who wish to register with the GDC and who hold the pre-1994 'National Certificate'. Many have been shocked to learn that their qualification is no longer recognised.

The National Certificate Examination did not change in 1994. Training courses did not significantly change either. What did change was purely the title awarded after the examination. Many people felt that the title 'dental nurse' was more professional and commanded more respect than the title 'dental surgery assistant'.

For all practical purposes, the National Certificate for dental surgery assistants was identical in every respect to the renamed National Certificate for dental nurses.

The GDC website explains that this decision was based on whether or not the qualification was still being awarded. This crucial decision is likely to do a great disservice to the dental profession.

It would have been far more appropriate to accept both dental nurse qualifications, and to require anyone who did not register by the 31 July deadline, to undertake 'back to dental nurse' training commensurate with the number of years they have been absent from the profession.

Some things like dental anatomy, physiology, assisted operating (Ellis Paul is still running his famous course!) will have changed little. Other subjects such as cross infection control and endodontics will have changed much more in recent years. If a dental nurse leaves the profession for a career break for any reason, a modular 'back to dental nursing' course would ensure that they were competent to work again.

Because the decision has been taken to no longer accept the pre-1994 National Certificate qualification, we now have the unacceptable situation whereby an excellent dental nurse, with 25 years experience, who happened to take a recent career break for 18 months, cannot now easily return to the profession. On the other hand, a dental nurse who qualified in 1995, but has been absent from the profession for the past 13 critical years, could register without problem.

One dentist on the GDPUK forum has reported that a qualified dental nurse, who once worked for him and whom he hoped would return to work for him, has now found herself unable to register without resitting the National Certificate. She is so disillusioned that she is planning on pursuing an alternative career instead.

Given that the National Certificate examination for dental surgery assistants was absolutely identical to the National Certificate examination for dental nurses and that any difference was in title only, I believe that potential registrants, who are denied registration, are being discriminated against on grounds of age. They just happened to be born slightly too early and qualified a year or two too soon.

The profession needs qualified and registered dental nurses now more than ever before, especially in rural areas. We should be welcoming dental nurses back to the profession rather than treating them in this manner.

E. Byrne
Bedford

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SHOOTING PAIN

Sir, we couldn't help but wonder if there was a common factor that contributed to the unusual manifestation following inferior alveolar nerve blocks. Paul *et al.*[1] described that their patient experienced a sharp pain following the insertion of a dental injection needle. Incidentally, we have also reported such a similar experience whereby one of our patients reported experiencing sharp shooting pain prior to local anaesthesia misadventure.[2]

We suspect that the piercing of the dental injection needle into the neurovascular bundle causes a breach and this allows the local anaesthetic agent to be percolated into it instead of surrounding it. This local anaesthetic agent is then transported retrogradely to a branch elsewhere, resulting in all of these unusual manifestations. We wonder what would have happened if Paul *et al.* did not deposit any local anaesthetic agent upon realising their patient was feeling sharp pain?

W. L. Chai, W. C. Ngeow
Malaysia

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MANY THANKS

Sir, my thanks to John Mew for providing 'a bit of historical background' (*Credit due*; *BDJ* 2009; **206:** 189) and for reminding me of the meeting 'in Tunbridge Wells in late 1972' which I can recall attending, only a few years after I had started in general dental practice. I can remember that, as John says in his letter, there was not a lot of enthusiasm for the scheme amongst those present but not surprisingly – after some 36 years – I didn't recall the comment which I apparently made at the time. I can only assume that my comment 'you are just changing one authority for another' was because the fee levels were to be set by the scheme and not individually by each dentist. I have long held the view that private fees should be a matter for agreement between dentist and patient, without the involvement of a third party.

I don't now recall the views of the Branch Council Chairman and Executive Committee when the matter was later referred to them.

I was most interested to be reminded of this early proposed private dental scheme; it would seem that in 1972 it was perhaps 'ahead of its time', given the apparently less than enthusiastic response of the dentists and their general satisfaction with the NHS at that time.

P. B. F. Swiss
By email

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