An amalgam-free world – are we and our patients ready?

I qualified 32 years ago in 1983 and can, sadly, still remember that one of the questions in my final written examination was ‘To compare and contrast the properties of the different plastic materials available to restore posterior teeth’. After varied general jobs in primary and secondary care, my career choice was to undertake specialist training in Restorative Dentistry. I completed my certificate of completion for specialist training (CCST) in Restorative Dentistry 11 years after qualification in 1994.

I have always tried, where possible, to be evidence-based and would describe myself as an early adopter of anything that I think will improve the quality of what I can provide to patients. I have attempted to upskill with virtually every major development relevant to Restorative Dentistry over the last 30 years. This has included: direct and indirect adhesive ‘additive’ dentistry, utilization of the Dahl concept, implants, augmentation and regeneration, operating microscopes with illumination, rotary (and reciprocation) endodontic instruments, 3D vertical warm obturation systems, digitization of radiographs, the use of CT and CBCT, HD video-capturing, websites, etc.

There is one area in prosthodontics where I have admittedly been very slow to change. I admit to caution on the use of composite resin when it is required to restore extensive intra-coronal cavities in posterior teeth, particularly when there is a subgingival proximal box with no enamel present at its base.

There are several reasons for this caution; such as my clinical experience, personal audit and interpretation of comparative evidence. My work in both primary and secondary care has taught me that the intra-oral environment for many patients with ‘deep’ posterior caries is often suboptimal. Difficult composite restorations take significant time and skill to place and are much more challenging in such circumstances. Additional training and equipment is necessary to achieve satisfactory results.

In 2014/15, I was elected as President of the British Society of Prosthodontics (bsspd). I was responsible for choosing the scientific content of the society’s 2015 annual scientific conference, which was held in London on March 27th and 28th in 2015. I was keen that the conference should include a ‘society debate’ on the implications to Prosthodontics and Dentistry in the UK, following the planned phase-down of dental amalgam as part of the Minamata convention. In truth, I wanted to find out whether the issue was still important in 2015/16 or not.

The debate was entitled: ‘Society Debate on the Implications of the Minamata Convention on Mercury to the use of Dental Amalgam – Should our patients be worried?’ I invited two experts to support amalgam and composite resin. There then followed an interactive debate around several pre-selected clinical scenarios/examples agreed by the experts.

The debate allowed ‘high tech’ interaction with the 350 delegates present, who were made up of a broad age and employment range, via smart phone voting and free text contributions. At the end of the debate the audience were asked several questions to include:

Should dental amalgam still be available for patient-care in UK patients after phase-down?

Should dental amalgam techniques still be taught at undergraduate dental school in the 21st century?

The full details and conclusions of this debate are reported elsewhere in this issue of Dental Update. ©
The way forward

The bsspd debate highlighted that many dentists attending the conference admitted to not feeling engaged with those making the decisions on the potential phase-down and potential future ban of dental amalgam in the UK. There was concern that, if dental amalgam is not available, then more teeth are likely to be extracted and more people will likely suffer significant biological complications as an unintended consequence of the loss of the material.

Many still feel that we are still some distance away from finding a new material that performs as well in difficult and compromised circumstances as dental amalgam. Without amalgam this problem is likely to affect our most vulnerable patients in particular – to include those with special needs, the elderly and the medically-compromised.

I am sure that we can all agree that UK dentistry should aspire to use as little dental amalgam as is possible in the future.

Bsspd would like to hear your views on the following:
- Is this topic still important for UK dentistry in 2016?
- If yes, should it be escalated to the top of the dental agenda for debate?
- Should a National Prosthodontic society like bsspd (and similar groups) be involved with canvassing/lobbying for an agreement that allows continued clinical use of dental amalgam for specific clinical circumstances?
- Should we as a profession be moving towards agreement of a formal understanding of what ‘exceptional clinical circumstances’ might mean for the limited continued clinical use of dental amalgam after a formal phase-down?
- Do you think that the clinical application of dental amalgam should still be taught in UK dental schools?

Both bsspd and I look forward to hearing your views via email:

Email: amalgam@bsspd.org

Weblink for the amalgam debate: www.bsspd.org/amalgamdebate