Then and now

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Lay journalists often ask, especially in the run up to events such as next month's BDTA Showcase Exhibition at Excel in London, what is new in dentistry? It is a legitimate, if routine question but one which is difficult to answer since although dentistry does change and has changed a lot in recent times, it tends to be a gradual process rather than being spurred in a matter of weeks or months by the sudden introduction of a new technique or innovative technology. That said, the same journalists will often begin their articles by reminding readers that dentistry has a venerable history, root canal fillings, for example, having been found in the teeth of skulls in tombs and archaeological sites of ancient civilisations, as in Egypt.

The reminder that endodontics has been around for so long is both interesting and salutary. One presumes that it was probably only the higher echelons of society that were privileged to such treatment (although privilege might be something of an overstatement centuries before the advent of local anaesthesia) and that for the majority the only other form of treatment would have been extraction. Curiously, if we look at the situation then and now, the choice between root canal treatment, that is retaining a non-vital tooth, and having it removed is still pertinent today. What is 'new' though is the availability of implants which is a good example of an innovation which, while it has not suddenly changed dentistry, has over the period of recent decades radically altered our options as clinicians and our choices as patients.

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Will there come a point when implants are so successful that endodontics ceases to be a reasonable treatment modality? We do not yet know the answer to the question but it is one which has been posed previously and is certainly worth examining again as more people keep more teeth for longer and an ageing patient population will expect retention, or replacement of teeth as a matter of course, or right.

Implantologists will doubtless rub their hands at the prospect, while endodontists clearly will not. But before we condemn the latter to history perhaps we should interrogate the evidence in order to test the likelihood. Endodontics certainly has made significant developments in the last twenty or thirty years in terms of instrumentation and materials as well as the increasing use of magnification in the form of operating microscopes and the more humble but none the less valuable loupes. But how much more successful are root canal treatments now, rather than then? Do we know? Is it still too early?

Implants have also made increasing strides and inroads into practice since the discovery of titanium as a reliable material for osseointegration. The growth of knowledge and technique, refined components, and one has to say inevitably some trial and error, even if the term refinement through experience may sound less alarming, have all led to greater surety of outcome. But the same questions have to be applied: how much more successful are implants now, rather than then? Do we know? Is it still too early? As so often we find that the evidence is at best equivocal and at worst, simply not available. More time is required, more studies are needed. Our quizzical journalist feels fobbed-off with caveats, with hedged and qualified small print. Do these treatments work or not?

The other crucially important factors are cost, and, associated with this, culture, individual situation and choice. If the social gradient in ancient Egypt dictated the level of care, so too does cash and circumstance today, albeit perhaps more subtly applied. Certainly not everyone can afford implants nor can the state afford to make them universally available. Arguably, the same might be said for endodontics where the time needed to provide a thorough upper molar therapy using an operating microscope is both costly and very specialised. Bluntly, the bottom line remains the same, extraction without replacement is the default even if we feel uncomfortable in admitting it these civilised centuries on.

So, what is new? Well endodontics certainly is not and implants can hardly pretend to be. What we can claim to be newer is that the decisions we have to make are becoming increasingly complex and require a greater amount of knowledge and understanding not only from ourselves but also from our patients. Sadly it does not make a convenient sound bite or snappy headline but it is quite as important as a redesigned instrument or some classy new packaging. Once again we find ourselves moving towards a situation where there are no glib or straightforward answers and where our engagement with patients requires us to have built a relationship that enables discussion and decision based on discernment and trust. Plus, of course, there may yet be further developments which sweep all this out of the way. Will stem cells mean that we can grow new teeth? Will techniques to alter bacterial habitat dismiss caries and periodontal disease at a stroke? While we can never know, it is as pertinent to keep asking the questions now, as then.

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