

## Preventing dental phobia

According to statistics, as many as one in seven adults in the UK have, at one point, suffered from extreme dental anxiety<sup>1</sup> – and the most commonly cited reason for this was the sound of the drill.

Interestingly, it is believed that the fear has very little to do with the noise itself – rather, it is purely associative, an audible representation of the expected pain of the impending dental work. Indeed, the sound and the perception of pain seem inextricably linked, with studies showing that those individuals who respond worse to the sound of the drill will subsequently experience greater pain.<sup>2</sup>

It is, however, very clear why dental professionals need to use their drills so often. In the UK, it is estimated that approximately 31 per cent of the adult population is afflicted by dental caries.<sup>1</sup>

Of course, the most common treatment for patients with dental caries is the removal of all decayed material with the drill and filling the subsequent cavity with a filling material. Indeed, in most cases, nothing more than this can be done. If the decay is allowed to progress further, the patient may need more invasive treatment, like a root canal or, in the worse cases, extraction of the affected tooth.

To make matters worse, new research has confirmed that those patients who suffer from dental phobia are more likely to have active dental caries – indicating a direct link between patients' fears and their oral health.<sup>3</sup> Naturally, the simplest explanation for this is that patients who are afraid of the dentist and their drills will be less likely to attend regular check ups, to the detriment of their oral health.

There is a solution to these problems, however. The 'Steele' report from 2009<sup>4</sup> has shifted the dental paradigm, with practitioners encouraged to focus on preventive dental care rather the restorative measures. In this case, the benefits of doing so are clear. If phobic patients can have their dental caries treated in a preventive and non-invasive way, they will not have to suffer the dental drill.

Unfortunately, active dental caries is notoriously difficult to detect in its earliest stages, exactly at the time when it can be regenerated. Normally, a patient will be diagnosed with tooth decay once they have attended a routine check-up and a carious lesion, along with the resultant cavitation it has caused, has been physically detected by the practitioner. After this, there is no choice but the dental drill.

With the new CALCIVIS imaging system, however, clinicians can identify active demineralisation on the surface of a tooth in its earliest and most reversible stages. Through innovative bioluminescent (light-emitting) technology, the CALCIVIS imaging system can help clinicians practice true preventive dentistry, effectively reducing the need for the dental drill – after all, a tooth doesn't need drilling if the decay has been spotted early. Contact CALCIVIS now - your patients will approve!

For more information visit [www.calcivis.com](http://www.calcivis.com)

---

<sup>1</sup> Oral Health Foundation: National Smile Month, Facts and Figures. Link: <http://www.nationalsmilemonth.org/facts-figures/> [accessed 16/6/17]

<sup>2</sup> The Guardian: *Scared of the dentist? This is why, say neuroscientists*. Published online: 10/11/13; link: <http://www.theguardian.com/society/2013/nov/10/dentists-drills-brain-neuroscientists> [accessed 16/06/17]

<sup>3</sup> KCL: *Those with dental phobia more likely to have cavities or missing teeth, study confirms*. Published online: 20/04/17; link: <http://www.kcl.ac.uk/dentistry/newsevents/news/newsrecords/2017/April/Those-with-dental-phobia-more-likely-to-have-cavities-or-missing-teeth-study-confirms.aspx> [accessed 16/06/17]

<sup>4</sup> NHS England: *NHS dental services in England: An independent review led by Professor Jimmy Steele*, June 2009. Link: [http://www.sigwales.org/wp-content/uploads/dh\\_101180.pdf](http://www.sigwales.org/wp-content/uploads/dh_101180.pdf) [accessed 16/06/17]