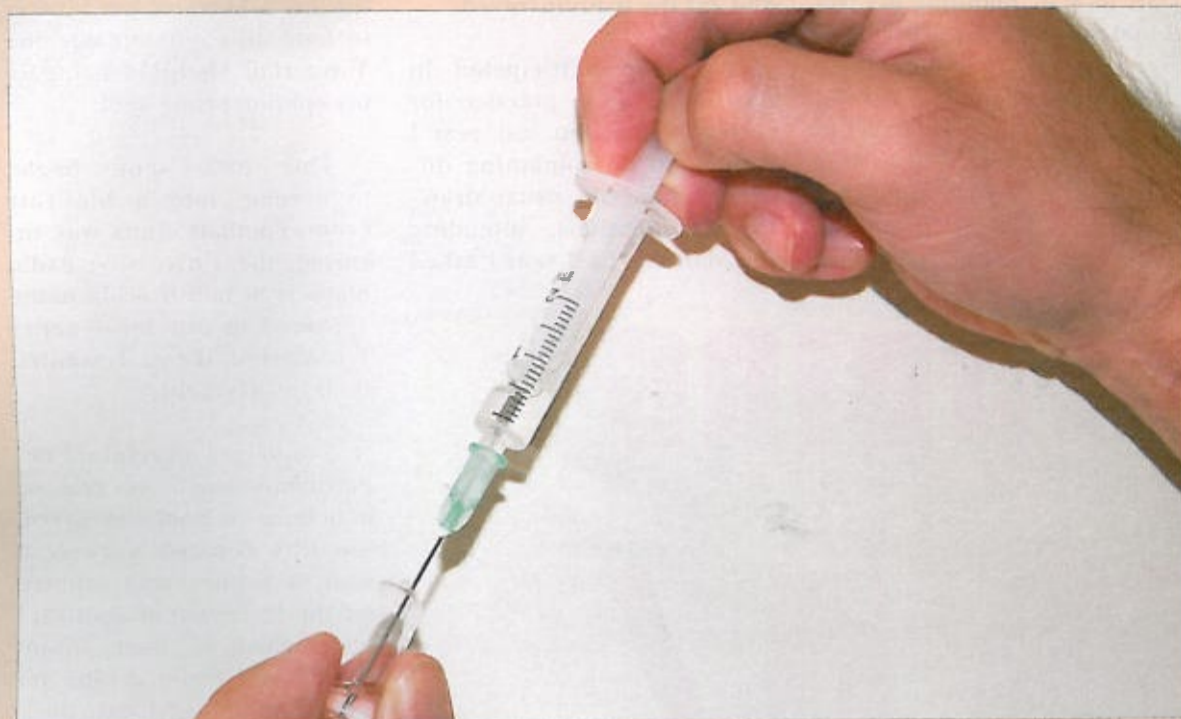


# Dealing with injection anxiety

Michael Sultan discusses the different types of infections



Patients tend to have fear and pain of injections

In the 25 years since I qualified, there have been incredible advances in dentistry, the equipment we use and the technology that is readily available. However, despite the media-hype that surrounds the latest needle-free dental injections (and there have been several) one has yet to be developed that is as effective at penetrating bone. It is hardly surprising then that most patients' anxiety is based on the double fear of pain and the injection. Ultimately a local, delivered neatly and carefully will go a long way to dispelling such anxieties and can help build a practice's reputation for empathetic treatment.

Of course, many patients will have suffered a bad experience which, in some cases will be because a local anaesthetic

was given too quickly and in the wrong location to an already stressed patient. Some patients even say they are allergic to adrenaline when in all probability they were given an injection too fast with the adrenaline going intra-vascularly and leading to an uncomfortable tachycardia. The pain of the actual injection varies according to the technique and the anatomical area; infiltrations in the posterior maxillary can be almost imperceptible while those in the anterior region or palate can be very tender and much of the pain can be caused by tissue tearing especially in the tightly bound periosteum of the palate.

There are many techniques for delivering good local anaesthetics that also help calm anxious patients and while it

would be easy to dismiss some of these techniques as mere placebos, I firmly believe that patients have the right to be pain free and, as clinicians, we have a duty to fulfil that whenever possible.

#### Topical anaesthetic

Studies suggest that the most significantly beneficial factor in using a topical anaesthetic gel is that it helps relax and reassure patients. Although there is some superficial numbing from the gel being placed against the mucosa, the level of penetration is small and of course, there is also the potential for allergy. However, many patients ask for a topical and it may help relax them. Indeed, some dentists often place the topical, then inject a few drops of local and wait before giving the full anaesthetic.

#### Warming the solution

There is little evidence that this actually helps ease the stinging discomfort of an anaesthetic. This is more likely caused by the pH rather than the temperature. However, it is very simple to warm solutions in special heaters and once again, this approach will help reassure patients and project a caring attitude from the clinician and dental team.

#### Distraction techniques

Many practitioners have their own tricks to distract patients during actual treatment, but for a local, there is some evidence that suggests vibrating the lip may reduce pain. There are even several special devices designed specifically for just this task, such as the Vibraject – a vibrating device attached to the syringe.

#### Needle-free systems

It is the needle itself that is the most common, overarching reason for patient anxiety about injections. Needle-free devices have been developed and are used effectively in other forms of medicine but the problem with dentistry is that the anaesthetic has to penetrate bone, so it has to be delivered under higher pressure. The inject system developed for children some years ago, proved unsuccessful as the actual delivery was quite a shock and there could be prolonged bleeds.

#### Slow injection with low pressure

In my opinion this is the key to delivering great locals for the very simple reason that injecting very slowly into an area that is numb can cause very little discomfort. This really is a drip-

drip approach as a few drops are injected before the needle is advanced a millimetre or two followed by another few drops. Slowly, slowly advance the needle until it is in the ideal location. I usually wait a short while before giving the full local. Giving a slow injection very calmly also prevents cardio-vascular problems from giving a local too fast. The Wand, a computer assisted local anaesthetic delivery system, can help administer very slow locals under low pressure.

Whatever techniques you use, the most important aspect of delivering a local is to calm and reassure the patient, listen to and empathise with their anxieties then inject calmly and slowly making sure you allow plenty of time for the anaesthetic to work. ■

#### About the author



**Dr Michael Sultan** BDS MSc DFO FICD is a specialist in Endodontics and the Clinical Director of EndoCare. Michael qualified at Bristol University in 1986. He worked as a general dental practitioner for 5 years before commencing specialist studies at Guy's hospital, London. He completed his MSc in Endodontics in 1995 and worked as an in-house endodontist in various practices before setting up in Harley St, London in 2000. He was admitted onto the specialist register in Endodontics in 1999 and has lectured extensively to postgraduate dental groups as well as lecturing on Endodontic courses at Eastman CPD, University of London. He has been involved with numerous dental groups and has been chairman of the Alpha Omega dental fraternity. In 2008 he became clinical director of Endocare a group of specialist practices.

Dr Michael Sultan can be contacted for advice regarding patients or any issues raised by his articles on [info@endocare.co.uk](mailto:info@endocare.co.uk).

## Do you need new patients?

In four short months our website for the public has attracted more than 500 people who are prepared to leave their present dentist and travel in order to find one with The Wand STA.

The Wand STA allows you to easily, quickly and predictably anaesthetise a single tooth, with no collateral lip tongue or cheek numbness. Our studies have shown that more than 80% of people prefer

The Wand STA to the syringe and are happy to pay a supplement making LA a profit centre.

Therefore by investing in The Wand STA you will be able to provide this new standard of service, retaining existing patients and adding new ones.

"The Wand really does give great injections in a slow gentle and very comfortable way" -

Dr Michael Sultan

40 million injections prove that The Wand works!

For more information please go to [www.d-p-s.uk.com](http://www.d-p-s.uk.com) To order please contact [info@d-p-s.uk.com](mailto:info@d-p-s.uk.com)

