## Laser perfect for atraumatic procedures in paediatrics

By Joseph Allbeury

or Perth-based specialist paediatric dentist, Dr Tim Johnston, dental lasers have become well and truly entrenched in his clinical protocols. Owning no less than five systems, he uses lasers in both his rooms and the operating theatre to deliver optimal care to his young patients.

"Lasers allow me to perform many procedures on children in the chair that would traditionally have been performed under general anaesthetic or perhaps not at all if the severity of the treatment outweighed the severity of the condition," Dr Johnston said. "Now lasers make formerly complex procedures far more routine."

The latest additions to Dr Johnston's practice in West Perth are a Syneron Lite Touch Erbium laser and a Fox 810nm diode laser, both supplied by Innovative Medical Technologies.

"The Syneron Lite Touch is a very powerful and it cuts very fast. It's ideal for hard tissue work and cavity preps. It's compact, sits under the bunch and is very easy to use. It has an intuitive digital touch panel display and it's very comfortable to use. The actual laser is in the handpiece – so there are no fibre optics in the arm – and it's balanced and supported in such a way that you don't even notice the handpiece is attached.

"The Fox diode is an excellent soft tissue handpiece that I'm using more and more as it lends itself well to paediatrics. At the time, the Fox was the only diode that was battery operated, which means I can use it in theatre without having it electrically tested every time I use it. It lives in the back of my car and I use it in theatre and in my rooms. It comes with two batteries and I think I have only recharged it



The Syneron Lite Touch Erbium laser is compact and portable yet high powered.

three times in a year. It's very portable and doesn't use a lot of power."

Dr Johnston said that compared to a restorative dentist working on adults, the procedures he performs as a paediatric dentist are relatively basic.

"I would probably only use 5 to 10% of the laser's full potential," he said, "but even so, I swear by the technology and have invested accordingly.

"Lasers are perfect for atraumatic cavity preparations, for example, as there is no vibration and the kids feel no pain. I have to remind young patients not to close their mouths as they can quickly forget I'm doing anything at all when they're engrossed in a DVD.

"I also use the Syneron Erbium laser to decontaminate fissures prior to sealing. On the low power setting, it will take out any organic matter in the fissure as far as the working length of the laser will go without affecting the enamel. It can also be set to slightly etch the surface when required to increase bond strength.

"As a paediatric dentist, I see lots of cases of molar incisor hypo-mineralisation. The molars are typically thermally

## Reference:

Albeury J. Laser Perfect for Atraumatic Procedures in Paediatrics. Australasian Dental Practice. 2010. Sep/Oct.