Is the future now?

By David L. Hoexter, DMD, FaCD, FiCD

A greater number of dentists may soon be ready to start using hard-tissue lasers in the preparation of teeth and reshaping of bone. The technology promises to be more precise, lead to more aesthetic results and, hopefully, be more economical as well.

Restoring the natural dentition has been one of the cornerstones of dentistry. Historically, GV Black was the first to use hand chisels to shape his design preparation for restorations. A foot-pedaled drill with special burrs followed. Belt-driven handpieces with drilling apparatus came next, along with a high-pitched whirring sound. Although the belt helped the practitioner promise to soar, the artistic ability to use the tip’s apex rather than the side of the filament, as many are accustomed to do with a burr, the artistic abilities of the practitioner promise to soar with this technology’s possibilities.

Testing in the exhibit hall

One example I recently learned about is Light’ Instruments’ LightTouch Er:YAG laser system, which was launched in the U.S. last year by AMD Lasers. It is a water-cooled laser that enables clinicians to shape osseous structure as well as the tooth as desired, without causing pathology, while achieving desired goals.

The disappointment of some of these early products dulled many practitioners’ hope and expectations for the use of lasers with hard-tissue procedures. But things are far different now!

The advantages of using a laser on hard tissue are enormous. To begin with, the laser is silent. The annoying and fear-provoking sounds of many high-speed, air-driven handpieces and the whirring, chilling noise of many belt-driven handpieces disappear.

Using a hard-tissue laser, the resulting margins of a tooth preparation in restorative dentistry are sharp and might prevent micro-leakage. The resulting longer-lasting restorations further justify the technology as economical and practical.

I encourage you to try one at a dental meeting where physical booths are present and let me know if you agree that the future is now.