SiroLaser Blue: Surgical Precision in Blue

The light visible to humans comprises the seven colors of the rainbow. Starting with short wavelength violet light, the spectrum ends in the long-wave red color range. In dentistry, blue laser light provides an outstanding effectiveness for soft-tissue surgery – as demonstrated by the SiroLaser Blue which is now launched in the U.S.

York/Salzburg, September 14, 2018. The cutting and disinfecting power of a laser depends on the amount of energy that is absorbed by the tissue. The newly launched SiroLaser Blue is the first dental diode laser in the U.S. which emits a blue light at a wavelength of 445 nanometers (nm). The blue light energy is absorbed particularly well by soft-tissue (i.e. hemoglobin and melanin). Consequently, the blue laser beam achieves nearly 100 times better absorption than infrared light. This enables very fast, precise and virtually painless cutting.

The results are impressive. Users of the conventional infrared diode lasers (810, 940 and 970 nm) must move the optical fiber slowly over the tissue several times, but the SiroLaser Blue enables immediate coupling with the tissue and considerably faster and cleaner cutting – without even touching the tissue – making this laser the tool of choice whenever dentists want to make an incision without bleeding during treatment.

The SiroLaser Blue is easy to operate and enables the dentist to treat patients with very little pain, reducing the need for local anesthetics, or even dispensing with them entirely. Gentle surgery, which often does not require postoperative stitches, reduces wound pain and scar formation. Postoperative bleeding and swelling also may be avoided.

Three wavelengths make SiroLaser Blue the All-round

Blue laser light is used particularly in soft tissue surgery because of its better absorption properties. Since the SiroLaser Blue can be operated at two additional wavelengths, it can also be used with infrared laser light at a wavelength of 970 nm, not only for traditional indications in periodontics and hygiene, but also in the treatment of canker sores and herpes. The SiroLaser Blue is also equipped with a visible red diode with a wavelength of 660 nm, which enables soft laser applications (LLLT/PBM, biostimulation).

“The cutting performance of 445 nm is simply phenomenal and it makes my work even more efficient.” Dr. Simone Suppelt, Germany

The SiroLaser Blue is now available in the U.S. and distributed through the dental distributors Henry Schein and Patterson.

IMAGES
are available for > Download on the website.
Fig. 1: The excellent absorption in tissue makes the SiroLaser Blue a perfect choice for soft tissue surgery. Equipped with two additional laser wavelengths, the laser is also well-suited for applications in periodontics/hygiene and Low-Level-Laser Therapy / Photobiomodulation.