Imagine a beam of light so intense that it quickly and comfortably cleans and sterilizes the most inaccessible areas of the teeth and gums

What you have imagined is real

While Albert Einstein never became the first president of the State of Israel as hoped, his discoveries have evolved to the state at which Israel is in the forefront of medical and dental laser technology. Israel is a world leader, having developed lasers that can now, when appropriate, efficiently replace the common dental drill, as well as the surgical instruments previously popular for treatment of gum disease and other surgical procedures. More so than most other medical lasers, the laser and light amplification systems used in dentistry function at relatively safe light- wavelengths and do so without the noise and pain of conventional dentistry. These systems are very precise, accurate, and safe

Opusdent's Erbium-Yag laser, which is made in Israel, painlessly prepares the tooth for restoration in an ultraconservative manner. It does so with no drill sound, no vibration, and usually without needles or anesthesia. With the assistance of plasma-glow technology, conventional silver fillings, crowns, and other more expensive and invasive procedures can often be eliminated, providing stronger, faster and often less costly restorative solutions

This advanced laser desensitizes, numbs, and sterilizes while performing it's function in minutes. Its uses for prevention, painless decay removal, root-canal sterilizantion, and the like are only some of the many wonderful applications

The Rolls-Royce of the soft tissue lasers is Opusdent's CO2 (carbon dioxide) laser, which replaces endless surgical procedures, doing so swiftly and with less pain during and after treatment. It evaporates rather than cuts, ster-ilizing and eliminating bleeding. In fact usually, patients on blood thinners (e.g., Coumadin, cartia) need not stop these life-saving medications, and the need for antibiotics is reduced or eliminated

Surgical treatment of gum disease, as well as unnecessary gum recession, sensitivity, and pain can now often be eliminated and prevented with many if not most procedures performed non-surgically and more conservatively, frequently without needles or anesthesia

Wisdom teeth, for example, previously requiring difficult surgical extraction, can in many cases be treated without the need for removal. Head and neck pain syndromes (TMJ) can also be treated more swiftly and painlessly

Almost miraculous is its ability to eliminate mouth sores (aphthous ulcers), cold sores, herpes, and other such lesions instantly and without discomfort

Highly uncomfortable ultrasonic cleanings and hand scalings for gum "treatment can now be performed with this "magic wand

While this may not yet be the practical approach for everyone, it is available to those who are especially sensitive. This is an indication of the direction in which modern dentistry is evolving

Dental lasers for children is a dream, eliminating injections, pain and the fear and discomfort of a numb face and lip

While nothing works always for everybody, dental lasers have ushered us into a new era of dental care. Diode lasers and plasma wavelengths now allow for complete one-sitting tooth-whitening (bleaching), often replacing orthodontics, caps, and crowns for instant same day tooth straightening, smile correction, and other cosmetic care. Gum pigmenta¬tions, for instance, can swiftly be removed in minutes

Laser implantology is in a new league of its own, often allowing implant placement and permanent missing-tooth replacement painlessly, eliminating surgery, stitches, mul-tiple procedures, and unnecessary CT's (cat- scans). Very often, teeth can actually be placed the same day, immediately restoring comfort, function and esthetics without the conventional discomfort

In many cases, it is no longer necessary to wait several weeks or months to receive new teeth. Implant dentistry is faster, easier, and better than ever before thanks to dental la-sers

Effective treatment of snoring, bad breath, and bone regeneration are amongst the many applications being further developed thanks to our ability to work so closely with one of the world's leading laser technology companies. While these lasers are quite costly and not yet within reach of most dentists, those who have acquired these systems are able to provide a new level of care — in fact, often less costly and far more conservative

No one laser system addresses all of a per-son's medical needs.

However, Israel has laser centers that do provide the full spec-trum of care — certainly something to look forward to in this bright new era — "the "Era of Dental Laser"

Dr. Gedaliah Mordechai Stern (U.S.A.) is a member of the Academy of Laser Dentistry, a Diplo- mate of the American Board of Oral Implantology, and a member of the American & International Academies of Periodontology. He is also the director of both The Jerusalem Center for Dental Lasers & Oral Impantology and The Jerusalem Institute of Continuing Dental Education