

Local podiatrists provide training in laser surgery

By JOAN PLASSMANN
Staff Writer

Lasers: the word conjures up futuristic images of Star Wars and space battles, but its modern applications to the medical field are already widely in use. And closer to home than you might think — two podiatrists from Humble are currently training physicians from around the country in laser surgery techniques for podiatry, and Doctor's Hospital at 5815 Airline has ordered a \$50,000 laser machine with attachments.

Dr. Michael H. Wynn and Dr. Timothy W. Lykke of the Gibraltar Savings Professional Building at 7702 FM 1960 East, work with one of the top four laser producers in the country and with the International College of Podiatric Laser Surgery to conduct seminars and permit observation of actual surgical procedures.

According to Wynn, some patients may be leary of surgery with lasers since they know little about the machine or the technique, but their worries are unfounded. "Surgery a laser is actually safer and less painful than surgery with a knife," he said. "In fact, lasers will eventually replace traditional surgery."

The term laser is actually an acronym for Light Amplification by Stimulated Emission of Radiation, and refers to production of photons, all of the same wavelength and focused into a narrow, coherent beam. A carbon dioxide laser is the most common, and is used in soft tissue surgery. Ophthalmologists use argon lasers, and, increasingly, yttrium aluminum garnet (YAG) lasers in their delicate surgery.

The principle of laser surgery is not complicated. "Your body is 90 percent water," said Wynn. "The laser vaporizes that moisture, and, unlike a knife, seals the bleeding and nerve endings. There is, therefore, less of a chance of metastasis."

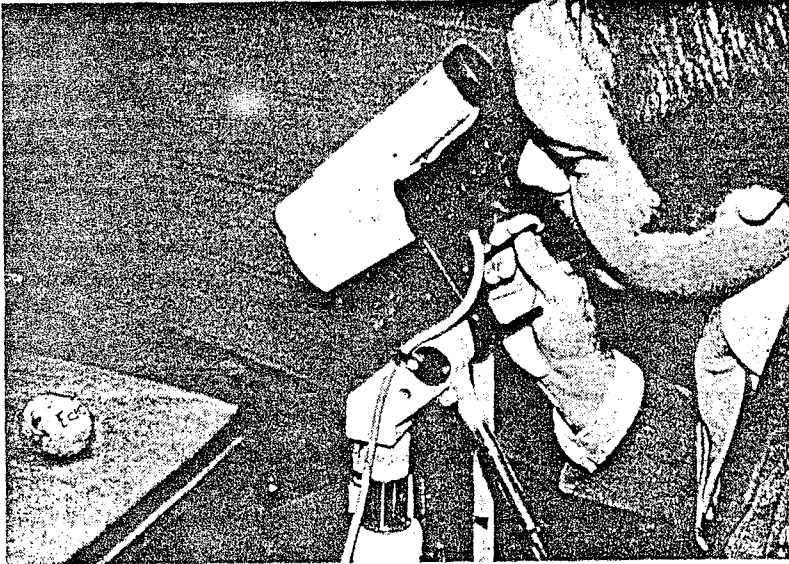
The laser also decreases pain after surgery by 40 to 60 percent, since the bleeding is sealed off. The quick recovery time has allowed for much surgery to be done on an outpatient basis. "Many patients never have to take a pain pill."

In explanation of the technique, Philip L. Bailin, M.D. states: "The laser system is extremely versatile. The beam is delivered to tissues through a surgical handpiece. If the beam is focused on the tissue surface, the impact spot size is only 0.1 to 0.2mm in diameter. The beam incises tissue cleanly acting as a laser scalpel."

"On the contrary, if the beam is defocused on the tissue surface, the spot size increases to approximately 2.0mm, acting as a surface vaporizing tool rather than an incising scalpel. Thus, the carbon dioxide laser beam can be used for incisional or excisional work as well as for surface vaporization."

The advantages of laser surgery over conventional surgery, according to Isaac Kaplan, M.D., of the Department of Plastic Surgery at Tel Aviv University, include:

- Non-contact surgery.
- Dry field, almost bloodless surgery.
- Highly localized and precise microsurgery.
- Clear field of view and easy access in confined areas.



USING LASERS. Dr. Michael H. Wynn, a podiatrist and member of the American Academy of Podiatric Micro Surgery, demonstrates the surgical uses of a carbon dioxide laser by etching the word "Echo" into the surface of a lemon. Lasers are useful to podiatrists in the removal of such ailments as warts, fungus nails and neuromas. — staff photo by JOAN PLASSMANN

postoperative swelling and scarring.

- Apparent reduction in postoperative pain.

- No electromagnetic interference on monitoring instrumentation.

Procedures now performed with the carbon dioxide laser are used in gynecology, otorhinolaryngology, plastic surgery/dermatology, neurosurgery, general surgery, bronchos-

copy and podiatry. The new laser machine coming to the Doctor's Hospital in March will be used by several specialists, and will be one of the first three in the Southwest to be used

for podiatry, according to Wynn and Lykke.

The specific uses of the laser in podiatry include treatment of warts, ingrown nails, porokeratomas, scars, fungus nails, dilated blood vessels and skin tumors. With the new machine's articulating arm, added attachments and 50 times the power of the office model, the doctors will also be able to treat neuromas, keloids, bunions, all skin incisions, corns, deep tumors, fibromas and

plantar flexed metatarsals.

"The laser," said Lykke, "is not a panacea." Age and other factors will still affect the process, but the ability of the laser to vaporize and sterilize has been proven to reduce infection and promote quick healing.

With the new application laser, Wynn said he feels like a candy store. "I may take away some of my scalpels and throw them away."