

For release Monday, March 5, 2001

LASERS ERADICATE VARICOSE VEINS WITHOUT SURGERY

AT A GLANCE

- ✍ Promising new minimally invasive treatment uses lasers to remove painful varicose leg veins.
- ✍ Early research shows EndoVenous Laser Treatment may be a good alternative treatment to surgery, which is more expensive, involves a longer recovery and can leave scars.
- ✍ One out of 2 people 50 and older and 15 to 25 percent of all adults suffer from varicose veins.

SAN ANTONIO — A promising new treatment that uses lasers

to zap unsightly, painful varicose leg veins is simpler and less costly than surgery.

“This is very cutting edge, and in 180 patients treated worldwide so far, the short-term results have been outstanding.

We have yet to have a complication,” said Robert J. Min, M.D.,

director of Cornell Vascular and assistant professor of radiology at

Weill Medical College of Cornell University, New York. “The

procedure takes a half hour, and although some patients have a

little tenderness, almost all can return to normal activity immediately.”

Dr. Min, the interventional radiologist who helped develop EndoVenous Laser Treatment (EVLTM) is presenting his research here today at the 26th Annual Scientific Meeting of the Society of Cardiovascular & Interventional Radiology (SCVIR).

A common condition, varicose veins affect 1 of every 2 people 50 or older, and about 15 percent of men and 25 percent of women overall. Varicose veins are caused by an incompetent saphenous vein, the main vein that runs the length of the inner leg. They occur when valves in

the vein become weak and allow blood to flow backward, or pool. Branch vessels of the vein, which are closer to the surface of the skin, then become enlarged and appear twisted and rope-like. Pregnant women and women with a family history of varicose veins are at highest risk to develop the condition.

Surgical ligation, or removal of the saphenous vein in the leg, fails about 1 in 10 times, and requires general anesthesia and up to two weeks recovery. Pain, bruising and scarring are common side effects. Another treatment, ultrasound-guided sclerotherapy, involves injecting an irritant into the saphenous vein to cause it to close up, however, about 50 percent of the time the saphenous vein reopens and symptoms return within a few years.

In the Cornell study, which reported on 90 patients who have received the treatment, 89 (99 percent) experienced no recurrence of the problem with an average follow-up of 6 months. In one patient, the vein reopened two months after treatment.

“Even when you remove the vein with surgery, there is a 10 percent recurrence,” said Dr. Min. “We have only had one recurrence so far, although we’ll need a few years of follow up before we’ll know what the true recurrence rate is.”

A recurrence can be caused by a reopening of the vein, the growth of new veins, or when other nearby veins becoming problematic after the saphenous vein is closed off. The problem has been known to recur as long as 10 years after surgery.

The new laser treatment involves using duplex ultrasound to map out the saphenous vein. The physician injects anesthetic at several points along the leg to numb it, then makes a tiny incision on the inside of the knee, and inserts a small catheter, or tube, into the saphenous vein, followed by the laser

fiber. The laser fiber is moved through the vein to the groin. The laser is then turned on, and its highly targeted energy heats and seals the vein shut.

The saphenous vein is deep in the leg. The branch veins of the saphenous vein, close to the skin, become twisted and unsightly. In some cases, after the saphenous vein is sealed shut, the branch veins will shrink. Other times, the patient comes in for a few sclerotherapy treatments, in which the irritant is injected directly into the branch veins, and very successfully eradicates them once the main problem is alleviated, said Dr. Min.

“Other lasers have been used to treat spider veins on the face and legs, but this is the first time laser energy has been used inside the vein to heat the source of the problem and close it off,” said Dr. Min.

The treatment costs about \$2,000; surgery typically costs three times that amount. Some insurance companies cover the EndoVenous treatment, Dr. Min has found.

Cornell Vascular is one of five centers in the United States and 10 worldwide offering EndoVenous Laser Treatment. More than a dozen new sites will be in operation shortly and physicians are now being trained in the technique.

An estimated 5,000 people are attending the SCVIR Annual Scientific Meeting. The Society, based in Fairfax, Va., is the professional association for physicians who specialize in minimally invasive interventional radiology procedures.

An interventional radiologist is a physician who has special training to diagnose and treat conditions using miniature tools and imaging guidance. Typically, the interventional radiologist performs procedures through a very small nick in the skin, about the size of a pencil tip. Interventional radiology treatments are generally easier for the patient than surgery because most involve no surgical incisions, less pain and shorter hospital stays.

#

Copies of 2001 SCVIR news releases are available online at www.pcipr.com beginning Monday, March 5.

Editor's note: Study numbers are current as of February 19, and may change upon presentation at the SCVIR annual meeting.

General consumer information on interventional radiology is available online at www.scvir.org.