

pressure from an isolated incompetent branch of a saphenous vein or a dilated perforator vein that transmits pressure directly from deep veins to the skin surface. In these instances, the abnormal vein should be injected using ultrasound guidance before surface reticular and spider veins are injected.



About Us

Maged S. Mikhail, M.D., R.V.T.

Dr. Mikhail has over 24 years of experience in private and academic practice, where he earned the rank of Professor of Anesthesiology and Surgery at the University Of Southern California Keck School Of Medicine.

He is a graduate of the University Of Florida College Of Medicine and has postgraduate training in internal medicine, anesthesiology, and critical care medicine, as well as phlebology. He is board certified in critical care medicine, pain management, and anesthesiology, and has certifications in cardiac and vascular ultrasound. Dr. Mikhail is among only a few physicians to achieve the designation of Registered Vascular Technologist. He is also an internationally recognized anesthesiologist and critical care specialist who has written four editions of

Clinical Anesthesiology, a book that has been translated into five other languages, as well as numerous articles in critical care medicine, cardiovascular anesthesia, pain management, and surgery.

Dr. Mikhail has expertise and an extensive background in peripheral and central vascular access, nerve blocks, various needle and catheter injection techniques, and ultrasound imaging. He trained with Dr. John Kingsley, an internationally recognized pioneer in phlebology, at the Alabama Vascular and Vein Center. Dr. Mikhail is also one of few physicians in Southern California who are trained in the CoolTouch endovenous laser ablation system. He is passionate about his work and committed to offering each patient individualized treatment to obtain the best possible result.

All our nurses are highly talented and bring a wealth of experience that includes outpatient, medical-surgical, intensive care, and operating room nursing. The office staff is courteous and professional. Our primary goal is to take care of our patients in the most pleasant and efficient way possible. We work as a team, and our patients frequently comment on their good experience at our Vein Center.



**Los Angeles
Varicose Vein Center**

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Sclerotherapy

We offer the full spectrum of treatments for vein disorders, including large and small vein sclerotherapy:

- **Foam sclerotherapy**
- **Ultrasound-guided injections**
- **Veinlite-guided injections**
- **Loop-guided injections**

For Appointments Call
(818) 654-0520

The Center

The Vein Center is a state of the art phlebology clinic that offers expertise in cosmetic sclerotherapy for spider veins, as well as large vein sclerotherapy for primary and adjunctive treatment of varicose vein disease.



Spider veins

What are spider & reticular veins?

Spider veins are unsightly dilated networks of tiny skin vessels that appear most commonly on the legs. They can be red, blue or purple, and when extensive, sometimes cause leg discomfort. Reticular veins are slightly larger and located deeper in skin; when their tiny valves fail they dilate, become tortuous, and produce localized backward blood flow; they often appear as unattractive networks of blue or purple streaks. Incompetent reticular veins typically “feed” one or more clusters of spider veins. Unlike varicose veins, spider and reticular veins do not bulge on the skin surface.

Why do I have them?

Many women inherit a predisposition to spider veins, which often appear during periods of rapid hormonal changes. Typical spider veins form on the outer thigh, knee and calf, and are due to incomplete closure of fetal veins that are prone to tortuosity and dilatation later in life.



Typical spider veins

When spider veins are located on the inner thigh or ankle, or the posterior calf they may reflect incompetent valves in the much larger saphenous veins. In such cases, a detailed ultrasound study is necessary to exclude venous insufficiency, which can eventually lead to serious problems.



Venous insufficiency with spider veins

Why treat spider and dilated reticular veins?

Many women are bothered by the unattractive appearance of these abnormal vessels. They avoid wearing shorts, skirts and bathing suits to hide their legs. Early treatment not only eliminates existing ones but can prevent new ones that are in the process of forming. When extensive spider veins are associated with aching, burning, or itching, symptoms often improve after treatment. It is important to have your spider veins properly evaluated before treatment to exclude underlying venous insufficiency. The doctor will tell you whether or not a detailed ultrasound exam is necessary.



Veinlite-guided injection of a feeder vein

How is sclerotherapy performed?

We offer all treatment modalities for spider veins but find sclerotherapy to be most effective. Laser and intense pulsed light (IPL) treatments are generally much less effective and less comfortable. Sclerotherapy involves injecting abnormal veins with one of several sclerosant medications, depending on the size of the vessel. Hypertonic saline is relatively ineffective, painful, and therefore no longer used. Modern sclerotherapy primarily utilizes foamed and glycerin solutions that enhance effectiveness and minimize side effects, such

as skin hyperpigmentation and matting. We use ultra fine 30 gauge needles that are virtually painless. Sclerosant medications cause veins to spasm and permanently close over the course of days to weeks. Some veins close with a small blood clot inside that may make them more prominent until the clot is absorbed by the body. Graduated compression stockings are worn for 1-2 weeks after injections to help keep the injected veins empty and minimize clot formation until permanent closure. Some veins may need to be injected a second time. The majority of patients need 2-4 injection sessions spaced 4 weeks apart. One or both legs may be treated during each session. In the first session, injections are mostly into incompetent, “feeder” reticular veins. These vessels often can only be visualized with a special bright light (Veinlite). Injecting only surface spiders and leaving “feeder” vessels intact decreases the efficacy of treatments and results in only short term improvements. Once feeder veins are closed, injections are primarily direct at any remaining spider veins.



Ultrasound-guided sclerotherapy

When are ultrasound-guided injections necessary?

Sometimes spider veins reflect localized high