

My dad is a doctor who works with different types of veins such as varicose veins and spider veins. He suffers from slight varicose veins as well. In March, I'll accompany him on a medical mission to Honduras, where we will be doing a number of procedures including one treatment for varicose veins. The chance that someone over the age of 65 will get varicose veins is about 35%. Because obesity frequently leads to varicose veins, many Americans are affected by these entangled, ropey veins. There are, however, more causes. Standing too much, and even sometimes pregnancy can lead to these veins. Not only do varicose veins look unsightly, but they cause pain throughout the leg and make daily life difficult. Throughout the years, advances in treatments for varicose veins have really changed the quality of care patients receive.

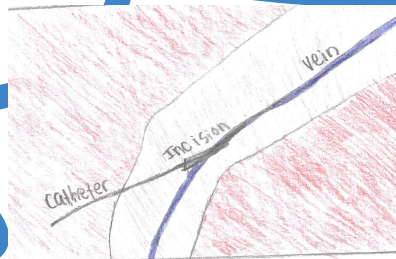
There are many forms of treatment, some involving lasers, others using surgery. One of the first treatments developed was the stripping of the veins. During this procedure, doctors use tools to remove the vein from the patient's body. Moving forward through history, there is the laser therapy. A catheter is inserted into the patient's vein, and the laser, which has been inserted into the vein, is turned on. This seals the vein which stops the vein from leaking. The closure therapy is very similar. The only difference is that instead of a laser, radio waves, which also create heat, are what seal the vein. Yet another treatment is sclerotherapy. Ultrasound is used during the process to see where to inject a medicine that brings the vein to its original state. Each therapy has been proven to have similar effectiveness, but some patients feel more comfortable with certain ones. It is important to have multiple treatments because different patients have different needs and can tolerate different things.

In 2012, a study conducted in Miami, Florida by Dr. Jose I. Almeida followed 38 patients, all of them were diagnosed with primary varicose veins. The patients were treated with the VenaSeal, a new therapy using medical glue to seal the vein shut. 94% of the patients' veins were fixed. This means that the patient could return to daily life, and have no trace of the vein having ever been so ropey. Dr. Edward McKay, who also participated in the study, says that VenaSeal is most likely "the future of varicose vein treatment." Based on the percentage of fixed veins, McKay could be right.

Varicose Veins



Laser Therapy



Julie Brittenden, a medical doctor from the UK, conducted a study about the long-term effects from different varicose vein treatments, including surgery, laser therapy, and sclerotherapy. Eleven centers lent information to Brittenden about status of patients months after treatment. All together, the study used a total of 798 patients, all diagnosed with primary varicose veins. Results showed that all treatments were similarly effective. The laser treatment, however, was less likely to cause side effects such as bleeding or bruising during therapy. While checking in with patients six months after treatment, the patients who received sclerotherapy rated their quality of life slightly lower than those who received surgery or laser treatment. It was also found that sclerotherapy was least likely to successfully ablate the vein.

Another recent study regarding the new treatment, VenaSeal, was conducted in August of 2014. The study followed 222 patients. It was found that 96.8% of patients were cured of their varicose veins. "To use VenaSeal, a physician guides a tiny catheter via ultrasound through a small access site in the skin to the diseased portion of the vein. Next a small amount of the cyanoacrylate glue is dispensed to close the vein, which immediately re-routes blood flow to healthy veins." Says a reporter about the function of VenaSeal. Peter Gregory, a vein doctor who works in Bellingham and Federal Way, says that he would love to start using VenaSeal, and that its good reputation would be great for his many patients. This process has helped so many, and once it is put into use in more offices, will help many more.

No matter the patient, there is always a treatment that can be used. More treatments are created, while the older ones still can be effective. Treatments have evolved, and will continue to evolve in order to completely bring the vein to its original state. People use all sorts of treatments from surgery to laser ablation, all the way to VenaSeal. Treatments get better, and patients recover better. In conclusion, treatments are always changing to fit patients needs, and we should be grateful for the hard work that scientists put into their biomedical research.