

2018 MID-ATLANTIC
CONFERENCE

8th ANNUAL CURRENT CONCEPTS IN
VASCULAR THERAPIES

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Introduction to Saphenous Vein
Ablations: When/Why/How?

Saphenous Vein Ablations: When/Why/How?

- “Venous disease is easy”
- “Treatment is straightforward”
- “The patients are always healthy”
- “I always treat them the same way”
- “It’s just a useless vein anyway”



Saphenous Vein Ablations: When/Why/How?

- Not so fast...

“When/why/how not to treat”

- Allow me to introduce Mr. C....68 yo presented on 10/28/15 with a several year history of leg fatigue with ambulation. However, for the preceding several months he was experiencing short distance bilateral claudication; fatigue-free walking distance approximately 100 yards. As an aside at the time, Mr. C also gave a history of undergoing bilateral great saphenous RF ablation for "leg swelling". He was told that he should undergo the procedure because his venous condition was "dangerous". Arterial noninvasive imaging revealed normal femoral waveforms with bilateral SFA and distal small vessel disease. The ABIs were 0.74 on the right and 0.85 on the left. Normal EF - 60%. Non-smoker. I started Mr. C on cilostazol. He was scheduled for a 3 month follow-up, but missed his appointment.



Short Answer

- The story continues...
- As it turns out Mr. C missed his follow-up appointment for lower extremity occlusive disease because of major medical reasons. He required urgent coronary artery bypass. Unfortunately he lacked the venous conduit necessary to perform the optimal procedure. He underwent internal mammary and left radial artery bypass with additional high-risk PTCL x 2.



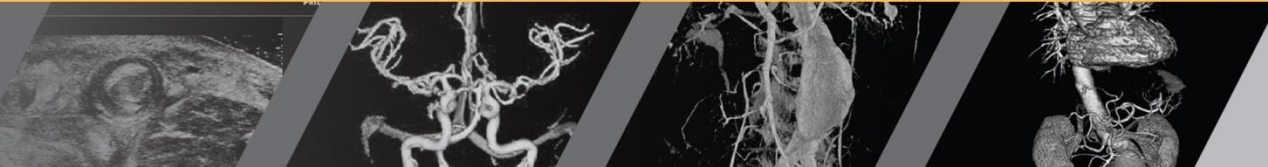
Short Answer

- The story continues...
- Mr. C returned on 4/16/18, now 70, describing worsening symptoms of claudication. However, he also described severe fatigue, extremity poikilothermia, paresthesias, shortness of breath, and difficulty arising from a chair. In fact, he had to use a wheelchair to get to the office. He told me that he could leave the office, but that he had to "lie down first". His repeat ABIs were 0.56 on the right and 0.71 the left (previously 0.74 and 0.85 respectively). I sent him directly to the emergency room.



Short Answer

- The story continues...
- Workup revealed new, fixed ischemic changes on EKG. Severe heart failure with ejection fraction 25%. Occluded stents on coronary angiography. Stents could not be recanalized/no additional PTCI options.



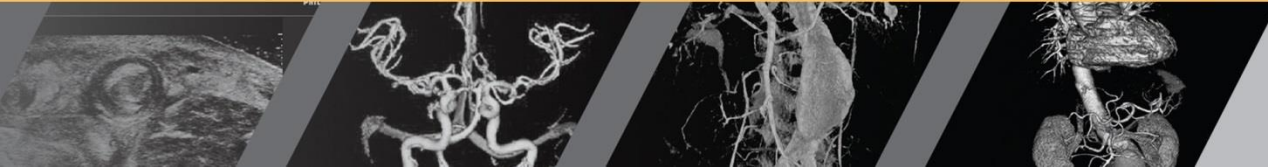
Superficial Venous Disease

- Never life threatening
- Never limb threatening
- Never “dangerous”
- Never *cures* “leg swelling” with treatment



Saphenous Vein Ablations: When/Why/How?

- Complex
- Pathophysiology
- Anatomical considerations
- Symptoms
- Individualized treatment
- Comorbidities



Saphenous Vein Ablations: When/Why/How?

The basic abnormality underlying the constellation of signs and symptoms known as “Chronic Venous Insufficiency” is an

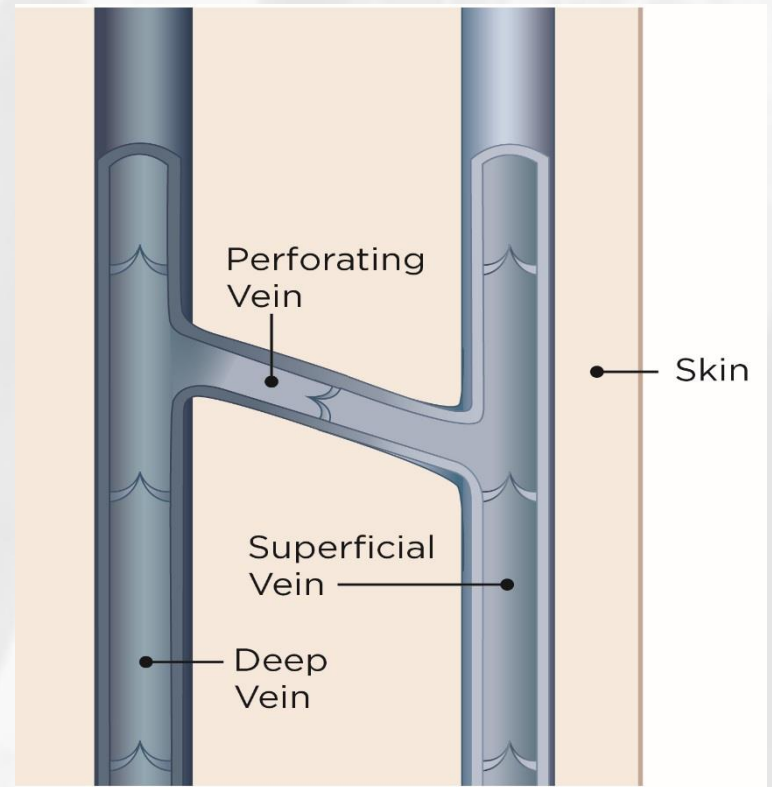
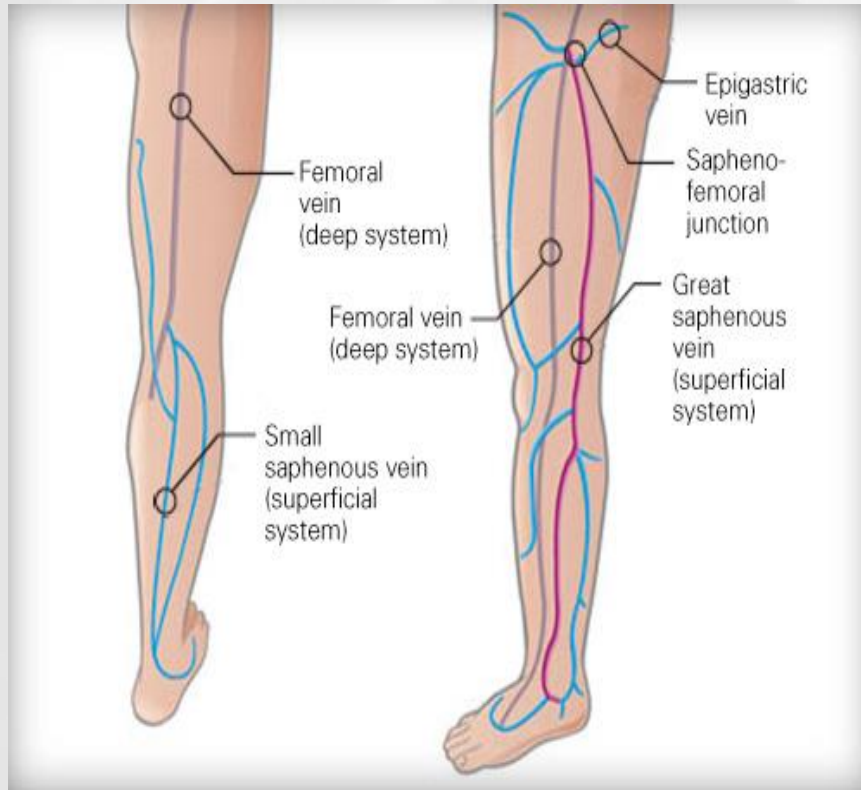
Elevation of Venous Pressure

“Venous Hypertension”

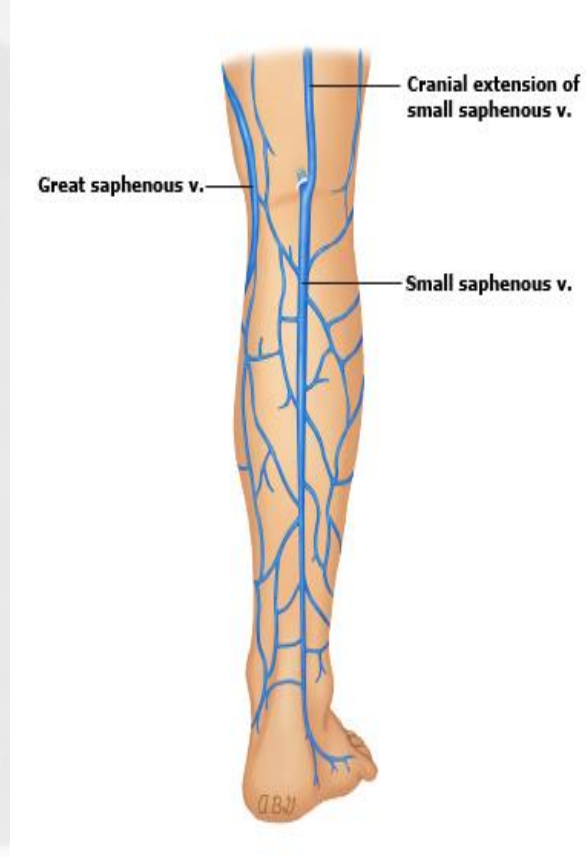
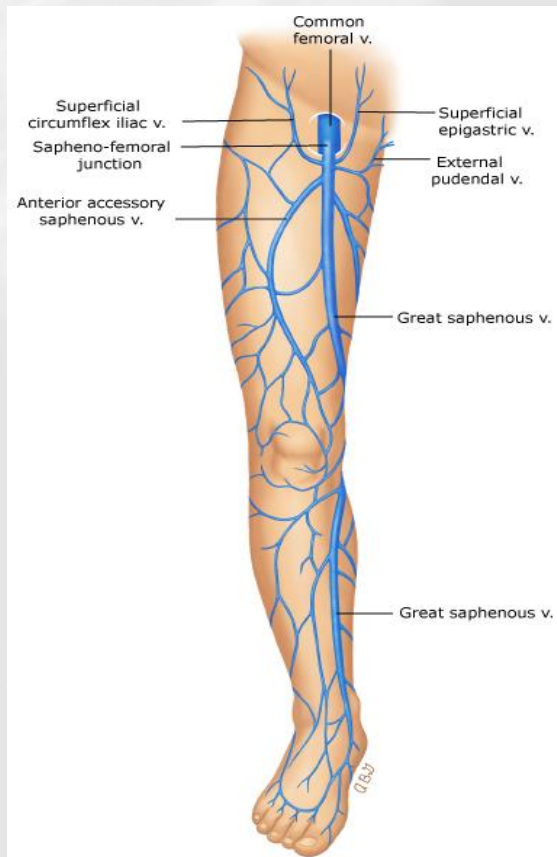
- Estimated that 30 million people in the U.S. are affected with varicose veins & symptomatic chronic venous insufficiency
- 30% of adult U.S. population afflicted – but only 10% correctly diagnosed or seek care
- Approximately 2 million new cases per year



Venous Anatomy

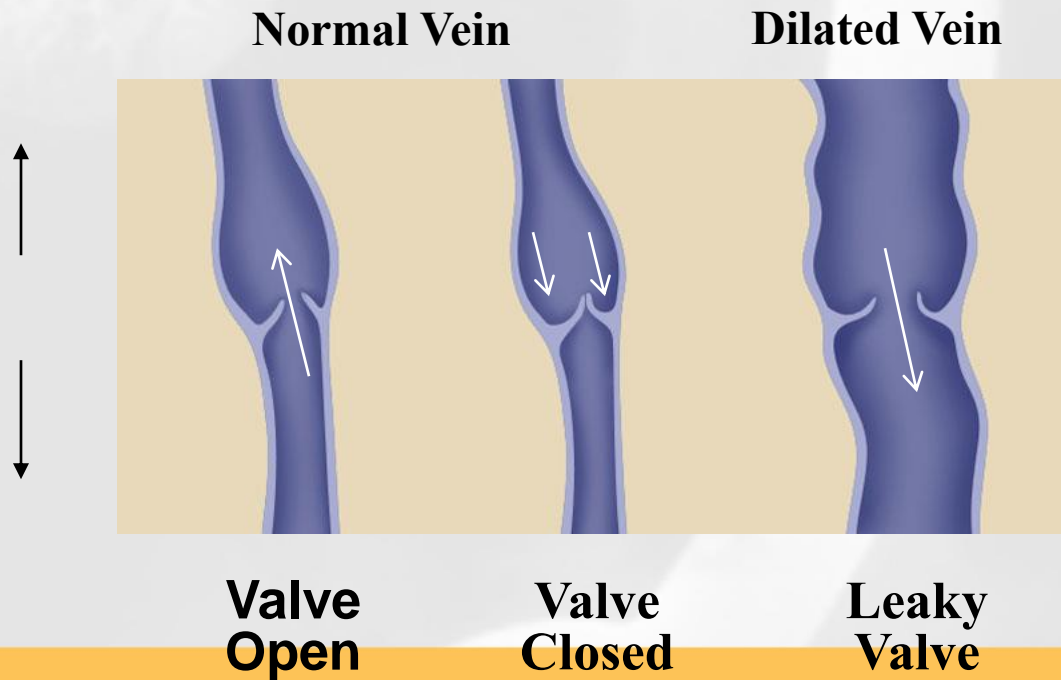


Venous Anatomy

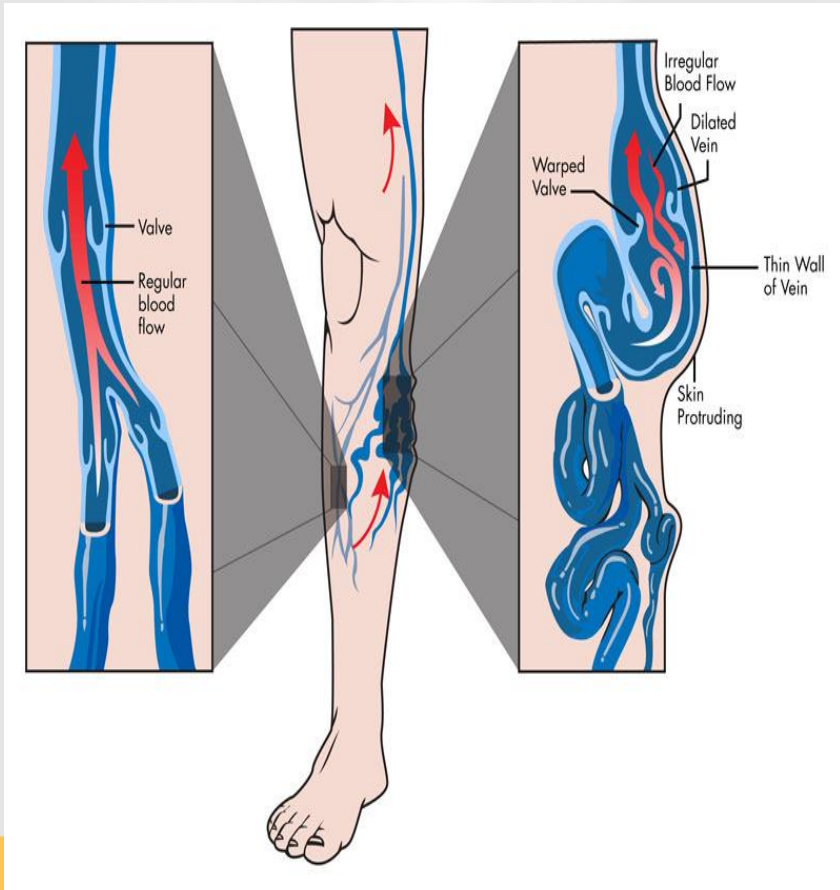


Pathophysiology of Venous Insufficiency/Hypertension

- Valves fail. Reflux. Increase AVP.



Pathophysiology of Venous Insufficiency/Hypertension



Saphenous Vein Ablations: When?

- Symptomatic and attributable to GSV/SSV
 - Painful axial varicose veins
 - Recurrent phlebitis/thrombophlebitis
 - Venous hemorrhage
 - Venous ulcer (isolated to superficial source - rare)
- Failure of conservative therapy – no one ever died from a varicose vein



Saphenous Vein Ablations: Why?

- To relieve venous hypertension in the saphenous system by eliminating reflux



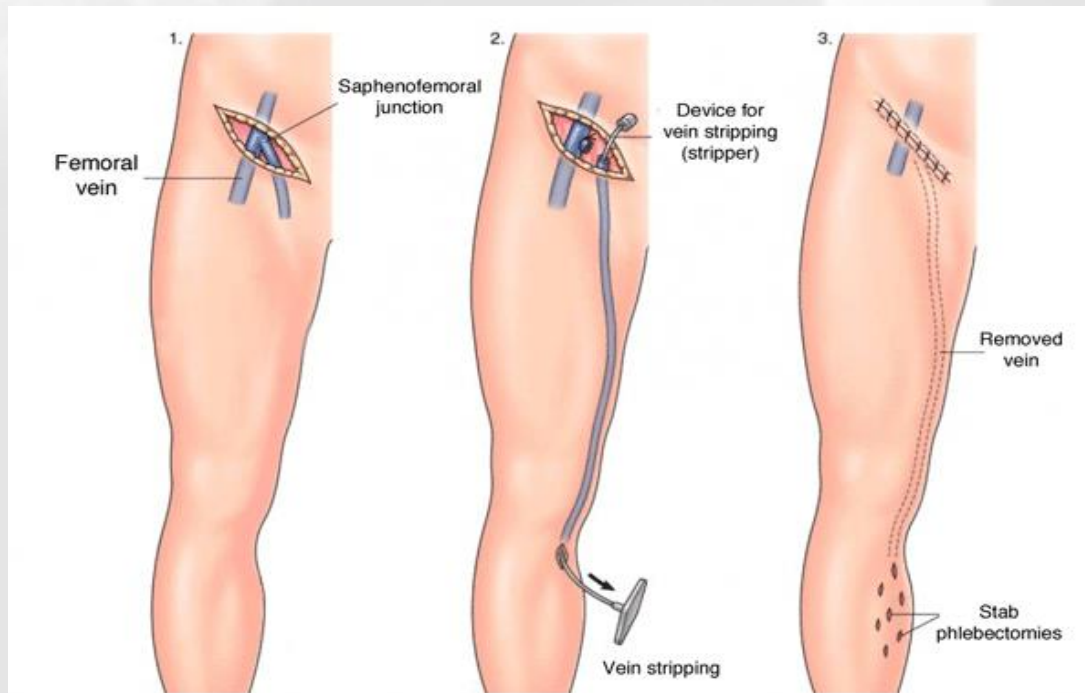
Saphenous Vein Ablations: How?

- Multiple procedures available
- Classic vein stripping
- Endovenous ablation
 - Laser
 - Radiofrequency
 - Foam
 - Glue



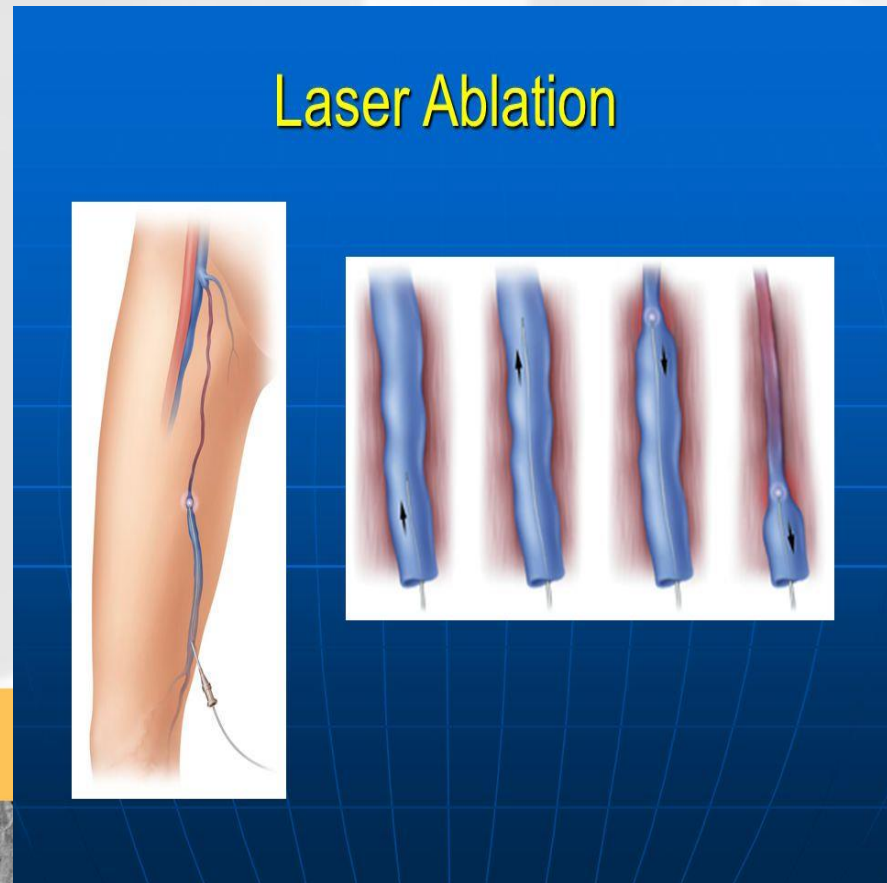
Saphenous Vein Ablations: How?

- Vein stripping



Saphenous Vein Ablations: How?

- Endovenous laser ablation

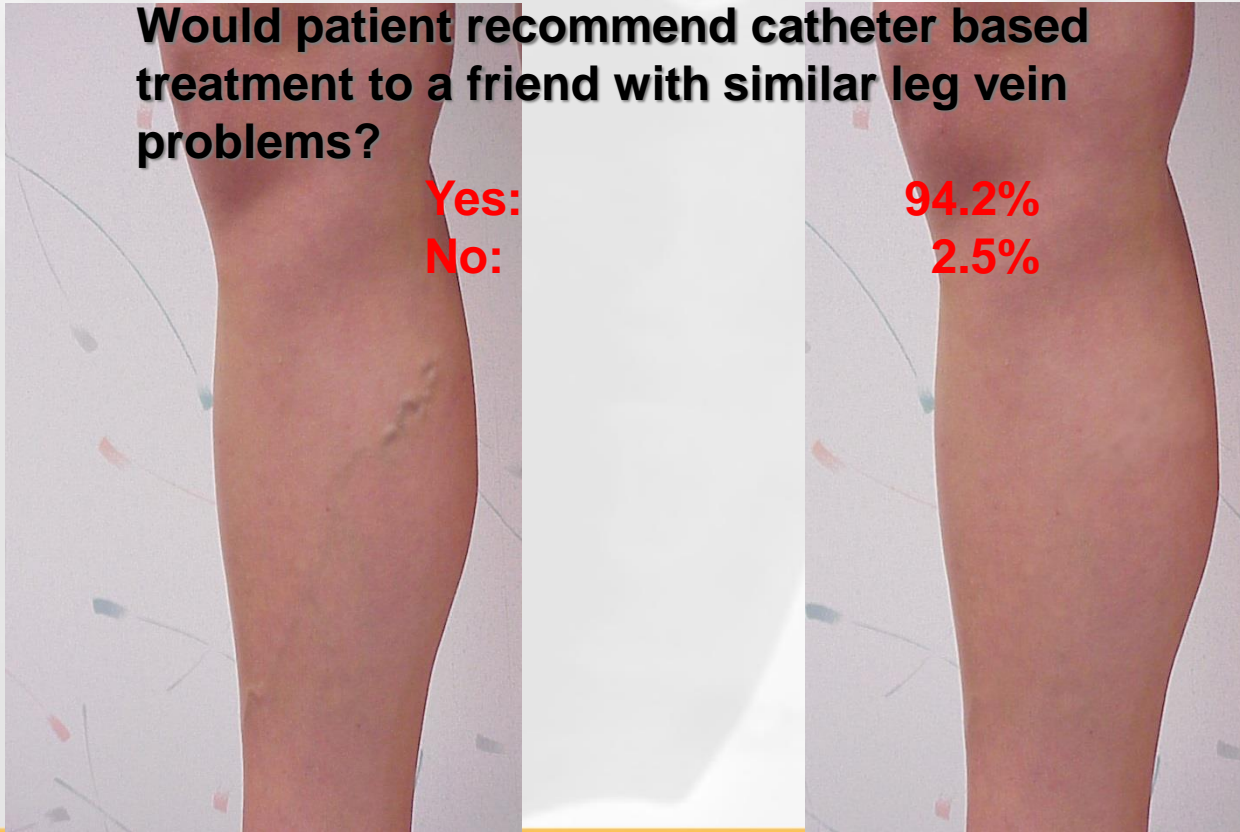


Saphenous Vein Ablations: How?

Would patient recommend catheter based treatment to a friend with similar leg vein problems?

Yes:
No:

94.2%
2.5%



Saphenous Vein Ablations: When/Why/How?

- Do the right thing for your patient
 - Treat failures of conservative therapy
 - Focus on venous pathophysiology
 - Treat venous hypertension
 - Treat to your comfort level
 - Know what you are treating and why you are treating it.

