VARICOSE VEINS
Not just a cosmetic issue
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Introduction

Overview of venous system

What are varicose veins?

Risk factors and symptoms

Treatment approaches

Question and Answer
What is Venous Medicine and why is it important?

- Specialty dedicated to the diagnosis and management of venous diseases
- Doctors that specialize in vein disease
- American Medical Association recognized specialty since 2005
- Board Certification since 2008. American Board of Venous and Lymphatic Medicine
Who does venous disease affect?

Prevalence

25% of Adults Worldwide
Range 7-60%

80+ Million Americans
Women - 25%   Men - 15%

<table>
<thead>
<tr>
<th>Ages</th>
<th>Women</th>
<th>Men</th>
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<tbody>
<tr>
<td>20-29</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>50-59</td>
<td>41%</td>
<td>24%</td>
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<td>70-79</td>
<td>72%</td>
<td>43%</td>
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The cost of chronic venous disease

- 2 Million working days lost per year
- 3 Billion Dollars annual treatment costs
- 20,000 new venous ulcer patients annually
- Chronic Venous Disease accounts for 1-3% of the total health care budget
The Venous System

- 25 miles of veins
- Made of a complex series of valves and pumps
- Moves blood “uphill”
- Functions as a reservoir
Healthy Veins

Normal Physiology

Normal venous circulation
- Smaller to larger
- Superficial to deep
- Up

Accomplished via series of one way valves and ‘peripheral heart’
What happens if the venous system fails?
What do we know about vein disease?

- Vein disease is treatable
- Often genetic in origin
- Chronic
- If left untreated, worsens with time
- Can lead to more serious health problems and complications
Risk factors and Symptoms

Cause and Effect

Varicose Veins

- Heredity
- Hormones
- Gravity
- Time
- Trauma
- Leg muscle
- Pump failure
- Postphlebitic Syndrome

- Pain
- Itching/Burning
- Fatigue
- Swelling
- Restlessness
- Heaviness
### What factors impact varicose vein symptoms?

<table>
<thead>
<tr>
<th><strong>Worsen</strong></th>
<th><strong>Improve</strong></th>
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<tbody>
<tr>
<td>↓ Standing still</td>
<td>↑ Elevating the Legs</td>
</tr>
<tr>
<td>↓ Sitting still</td>
<td>↑ Walking</td>
</tr>
<tr>
<td>↓ Lying still</td>
<td>↑ Compression Stockings</td>
</tr>
<tr>
<td>↓ Heat (dilates veins)</td>
<td></td>
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<tr>
<td>↓ Menstruation/Pregnancy</td>
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What do Varicose Veins Look Like?
Spider Veins (Telangiectasias)
Large Varicose Veins
If left untreated...

Complications

- **Superficial Phlebitis (SVT)**
  - 90+% with CVI
  - 4.4% develop DVT+/− Pulmonary Embolus w/in 3 months of initial SVT diagnosis
- **Deep Venous Thrombosis (DVT)**
- **Venous Stasis Dermatitis/Ulceration**
- **Bleeding**
- **Chronic Pain Syndrome**

Evaluation and Treatment of Vein Disease
Treatment Options

- Conservative Management
- Traditional Surgery
- Minimally Invasive
  - Thermal
  - Sclerotherapy
Conservative Treatment Options

- Compression stockings
- NSAIDS
- Exercise
- Leg Elevation
- Avoiding High Heels
- Weight Loss
Traditional Surgery

Vein Stripping Surgery
- Archaic
- Hospital stay required
- Extended recovery period
- Not comprehensive

Surgical Stab Phlebectomy
- Small segments of vein are removed through incisions
- Removes the abnormal vein, but not the root cause of the reflux
- Can not be used for spider veins
Minimally Invasive

Starts with an Ultrasound Evaluation!
Minimally Invasive Surface Treatments

Skin Surface Lasers
- Heat energy burns through the skin
- Will only work for extremely fine spider veins

Surface sclerotherapy
- Abnormal veins are injected with a sclerosant using a very fine needle
- With appropriate strengths of a proper sclerosant (not saline), it is effective for all types of varicose veins
Endovenous Laser Treatment (ELT)

• In office procedure
• Walking immediately afterward
• Safe and Effective
• Not comprehensive alone
• Most effective when used in conjunction with ultrasound guided sclerotherapy
Ultrasound Guided Sclerotherapy

Microfoam Sclerotherapy

- Abnormal veins are injected with a sclerosant with ultrasound monitoring
- Ultrasound monitoring and guidance provides safety and comprehensive treatment
- Can be used alone or in conjunction with Endovenous Laser Treatment
Will Insurance Pay for Varicose Vein Treatment?

YES!

“Medical Necessity” needs to be determined

- Persistent symptoms or complications
- Duplex Ultrasound evaluation
- Conservative treatment trial
Conclusion

- Vein disease affects many people
- Vein disease is treatable
- There are several options to treat vein disease, find the one right for you
- Seek treatment from a physician experienced in treating the entire spectrum of vein disorders
Questions?
Thank You!

Vein Clinics of America