Introduction to Sclerotherapy

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“We have moved from experienced-driven dogma, through retrospective analysis of experience, to evidence based medicine from prospective trials....”

Prof Mark A Talamiri
Dept Surgery, USCD
Preface to “The Vein Book”
SCLEROTHERAPY: ART & SCIENCE
History:

1851 – syringe invented

1853 – sclerotherapy

1980s – duplex Doppler ultrasound
Causes:

Family history
Prolonged standing
Surgical stripping
Pregnancy
Gula, Acedia
OCP, HRT
<table>
<thead>
<tr>
<th>Vice</th>
<th>English</th>
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<tbody>
<tr>
<td>Luxuria</td>
<td>lust</td>
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<tr>
<td>Gula</td>
<td>gluttony</td>
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<td>Avaritia</td>
<td>greed</td>
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<td>Acedia</td>
<td>sloth</td>
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<td>Ira</td>
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<td>Invidia</td>
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<td>Superbia</td>
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PHLEBOLOGY TECHNIQUES:

• Microsclerotherapy
• Superficial sclerotherapy
• Ultrasound Guided Sclerotherapy
• Endovenous Laser Ablation
• Phlebectomy
• Doppler
• Duplex Scanning
What should I do?

- Australasian College of Phlebology
- Texts books
- Preceptorship
- Certified Sclerotherapist (Certificate Course)
Use a CW Doppler
Start cautiously
Know your solutions:

• (Hypertonic saline 20%)

• Laureth-9 (polidocanol – Aethoxysclerol) 2mg/Kg/day

• STS - sodium tetradecylsulphate (Fibrovein) 4mls 3%, 10mls 1%, 0.5%
Become familiar with compression stockings

- mmHg
- European class 1 to 4
- US class 1 to 4
Know the complications and how to treat them
Anatomy:

10.00 to 11.30 – Mark Elvy
Physiology:

THE EFFECT OF POSTURE AND EXERCISE ON VENOUS PRESSURE AT ANKLE

VENOUS PRESSURE
mmHg

100
80
60
40
0

1 2 3 4 min

LYING

RISING

STANDING STILL

STANDING STILL

WALKING

= in normal limb

= with defective valves
Presentation

Cosmetic:
Presentation

Symptoms:

- Pain
- Burning
- Aching
- Heaviness
- Throbbing
- Restless legs
- Leg cramps
Presentation

Complications:

• Hyperpigmentation
• Bleeding
• Thrombophlebitis
• Eczema
• Oedema
• Ulceration
• Infection
• Atrophie Blanche
• Lipodermatosclerosis
Management

- Consultation
- Photography
- Doppler / Duplex
- Treatment options
- Sclerotherapy, EVLA, UGS, phlebectomy
- Compression
- Review / re-treat
Who’s up to date?

- Great and small saphenous veins
- Laureth-9 (polidocanol)
- Treat the varicosities to heal the ulcer
- No upper limit of size for non-surgical procedures
- Distal perforators are re-entry sites
- Varicose vein not used for CABGs
- A growing number of vascular surgeons consider flush ligation and stripping to be obsolete
Crossing your legs does not cause varicose veins

High heel shoes?