Endoluminal treatment of varicose veins

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Disclosure

Speaker name:........................................................................................................

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest
Etiology of Venous Reflux

- Age
- Sex
- Weight/Obesity
- Family History
- Height
Since ~1500 B.C.
Phlebotomies
Incisions
Extractions
Bandages

1682
Dr. Zollikofer SG
1st Sclerotherapy

1848
William Brown
Compression hoisery

1905
Keller Stripping
(modified by Babcock 1907)
Development of Endovenous Techniques

- **1854** – Gaetano Conti „electropuncture & catherization“
- **1964** – Werner & McPheers „electrofulguration“
- **1972** – Watts „diathermie“
- **1981** – Milleret & Le Pivert „freezing technique“
- **1989** – Puglisi „endovenous laser“
- **2000** – Mitchell Goldman „radiofrequency ablation“

Passage of Tortious Segments
Fibre & Vein

Radial Fibre

Bare Fibre

Fig. 3 Coagulum on a fiber tip held stationary in blood; the laser at 1,470 nm wavelength emitted 1,000 J of energy at a rate of 6 W

Human Vein Segment After Laser

Types of Catheters

Steam
Laser
Radio-Frequency
Mechano-chemical
Chemical

Heat induced Closure

Summary

• Enovenous thermal ablation (Laser & RFA) are the current standard of treatment for varicose veins

• Safe therapy in all stages of CVI

• Procedure done under US-guidance & local anaesthesia

• Procedure can be done in outpatient setting
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