#### **SHOULD WE STILL OFFER** SURGICAL INTERVENTION FOR **VARICOSE VEINS?**

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#### **UGLY?**



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#### **OTHER REASONS**



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#### **OTHER ISSUES**

- Framingham study
  - 20% varicose veins
  - 5% oedema, ulcers etc.
  - Annual incidence 2.6% women and 1.9% men
  - Costs
    - NHS £20-25 million
    - \$150 million-\$ 1 billion

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#### **CONSIDERATIONS**



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# SHOULD WE ST SURGICAL INT

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### **NO SURGERY**

- Medication
- Stockings
- TLC Tender Loving Care



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## **Needfon 50** (Micronized purified flavonoid fraction) Tablets MPFF, 450 mg diosmin plus 50 mg hesperidin

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#### DRUGS

- Cochrane review is insufficient evidence to support the global use of venoactive drugs in the treatment of CVD.
- The SVS/AVF Guideline Committee, however, suggests that these drugs may be used for patients with pain and swelling due to CVD.

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#### **COMPRESSION THERAPY**



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#### **COMPRESSION THERAPY**

- The Randomised Clinical Trial, Observational Study and Assessment of Cost-Effectiveness of the Treatment of Varicose Veins (REACTIV)
  - In the first two years after treatment, surgery provided more symptomatic relief and improvements in QOL than conservative management with compression hosiery and lifestyle modifications in patients with uncomplicated varicose veins.
  - Surgery was significantly more cost-effective than both sclerotherapy and conservative management.
- A large meta-analysis of compression hosiery for simple varicose veins by Palfreyman and Michaels found that, although compression improved symptoms, it did not decrease progression nor did it prevent recurrence of varicose veins after treatment.

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#### **COMPRESSION THERAPY**

- In the Effect of Surgery and Compression on Healing and Recurrence (ESCHAR) Study, 500 patients with leg ulcers were randomised to compression alone and combined compression plus surgery (high ligation and stripping).
  - At 24 months the recurrence rate was significantly lower in the compressionsurgery group (12% vs 28%).
  - The rates of ulcer recurrence at 4 years were 56% for the compression-alone group and 27% for the compression surgery group.
- SVS/AVF Guideline Committee recommends against compression therapy being considered the primary treatment of symptomatic varicose veins in those patients who are candidates for saphenous vein ablation.
  - These guidelines also highlight the lack of scientific evidence to support the initial period of conservative therapy mandated by many in patients who are suitable candidates for surgical therapy.
  - The benefits of wearing compression in order to slow the progression, or prevent the occurrence of further varicose veins cannot be supported by the current published evidence.

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#### **HIGH LIGATION AND STRIPPING**



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#### **HIGH LIGATION AND STRIPPING**

- Lofgren and Lofgren at the Mayo Clinic
  - high ligation of the GSV was compared with groin to ankle stripping.
  - Excellent success (symptomatic relief) were achieved in most patients who had GSV stripping (94%) compared with only 40% of the patients who underwent high ligation alone.
- GSV stripping was associated with better immediate results and a decrease in the long-term varicose vein recurrence rate.

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#### **TRANSILLUMINATED POWERED PHLEBECTOMY** (TIPP)



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#### **TRANSILLUMINATED POWERED PHLEBECTOMY** (TIPP)



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#### CHIVAL



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Prin efectuarea unor microincizii, circulatia venoasă este deviata prin vene sănătoase, cu valve competente, obtinăndu-se un flux continu, cu presiuni normale, cu excluderea numai a segmentelor incompetente

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#### ASVAL



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#### **ASVAL AND CHIVAL**

- Randomised controlled trial (RCT) by Rasmussen et al.
  - Surgical treatment is superior to conservative management of varicose veins with use of elastic garments.
  - Marked improvement in QOL after open surgery was also demonstrated in an Improvement in QOL from varicose vein surgery has been shown to be statistically significant and clinically meaningful, matching the benefits observed after elective laparoscopic cholecystectomy.
  - Although endothermal ablations are favoured in the United States, in many countries conventional surgery remains the standard of care of patients with varicose veins.

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#### **ENDOVENOUS THERMAL ABLATION**



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C Copyright res Kopiereg voo Catheter advanced to treatment area



Vein closes as catheter is withdrawn



#### **RESULTS - RFA**

- Long-term studies of RFA using first-generation devices have revealed occlusion rates of 87% at 1 and 5 years after the procedure in more than 1200 treated limbs.
- Prospective randomised studies also revealed that RFA has comparable results to high-ligation and stripping with regards to recurrence both in the short, mid and long-term.
- RFA was better tolerated by patients and associated with a quicker recovery period and improved quality of life scores.
- RFA has been shown to be a minimally invasive, safe and effective procedure for the treatment of varicosities; 3-year data confirm its durability.

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#### **RESULTS - EVLA**

- EVLA has been shown to be effective for saphenous vein surgery, with impressive clinical outcomes that are at least comparable, if not better than open surgery. EVLA short-term outcomes are equivalent to high and ligation, with reduced postoperative pain and bruising.
- RFA and EVLA have similar outcomes, with more than 90% GSV occlusion rates. EVLA can be used in the GSV and SSV, as well as for branch varicose veins.

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#### **SCLEROSING AGENTS**



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#### RESULTS

- FS of the saphenous vein is the least invasive of the endovenous ablation techniques. The European Consensus Meetings on Foam Sclerotherapy reported that foam was an effective, safe, and minimally invasive endovenous treatment for varicose veins with a low rate of complications.
- Since long-term results of FS of the GSV are not available, evidence for durability of foam for saphenous ablation was judged by the SVS/ AVF Committee as being of low or very low quality.
- It is therefore concluded that there is currently insufficient evidence to allow a meaningful comparison of the effectiveness of this treatment with that of other minimally invasive therapies or surgery.

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#### **OTHERS**

- Cryoablation
- Steam Therapy
- Mechanico-Chemical Endovenous Ablation
- Sapheon Venaseal

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#### CONCLUSION

- Open high ligation and stripping has truly become a procedure of the past, with the new generation of endovenous treatments offering effective, minimally invasive and safe treatment. the 1980s,
- The new, minimally invasive treatment options are offered as outpatient procedures; they are performed in an office setting under local anaesthesia, with significantly less complications than classical surgical procedures and permit early return to work with the associated cost savings for the society.
- Scientific evidence on the efficacy of therapy, however, should always be combined with the physician's clinical experience and the patient's preference to select the best possible treatment for each patient.
- Appropriately selected patients will greatly benefit from the treatment of varicose veins and CVI.

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