



Henri Matisse, L'Escargot 1953

How to Ensure the Success of Traditional Surgery in Varicose Vein Treatment: 10 Rules to Respect

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How to ensure the success of Traditional Surgery



NO DISCLOSURE TO DECLARE

How to ensure the success of Traditional Surgery



The diagnosis and management of varicose veins
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- 1. Offer Endothermal Ablation**
- 2. If unsuitable offer UGFS**
- 3. If unavailable offer Surgery**



Traditional Surgical Treatment

High Ligation

Homans J

Surg Gynec Obstet 1916

Homans introduced the concept of flush high ligation.

Stripping

**Keller WL (1905) -Van der Stricht
1963 invagination stripping.**

Mayo CH (1906) external stripping

Babcock WW (1907)





1. Careful echocolor Doppler examination

**New concepts on the value of the pre-terminal
and terminal valve of the Sapheno-Femoral
Junction**



2. Competent Terminal Valve

in **63.1% of cases** (*Zamboni et al. 2010 Br J Surg*)

in **45 %** (*Cappelli et al.2006 Int Angiol*)

Why to treat it?

In these cases flush high ligation is not indicated



3. Incompetent Terminal Valve

**Its preservation in the endovascular procedures
doesn't mean recurrences!**

Why to treat it?

**Can we perform a less invasive surgical
procedure?**



4. High ligation: how to do it?

- Invagination of the saphenous stump
- Closure of the “fossa ovalis”
- perform it under local anesthesia

N. Frings *Relacs Study Arch Dermatol 2012*

➤ > incidence of refluxing SFJ after EVLA at 2 years



5. Reduce neovascularization

- a. Delicate surgical technique**
- b. Adequate technical choice**



6. The saphenous trunk

Do we have to preserve it??

- a. - Duplex Ultrasound elimination test (RET) + competent terminal valve (*Zamboni 2010 Br J Surg*)

- b. - Diameter of the vein (*Pittaluga 2009 J Vasc Surg*)



7. The saphenous trunk

Do we have to treat it??

**Treat only the refluxing segment of the
saphenous trunk**



8. Perform less invasive surgical procedures when indicated

- Phlebectomy – ASVAL**
- Tailored stripping with or without flush high ligation**
- Simplified high ligation**
- CHIVA**



9. Choose the ideal setting to be competitive with the endovascular techniques

Outpatient setting

Tumescent local anaesthesia

Proebstle et al. High ligation and stripping of the long saphenous vein using tumescent technique for local anesthesia Dermatol Surg 1998 24:149-53

Balducci et al. Ambulatory saphenectomy: 80 operated cases using tumescent anesthesia Chir Ital 2002; 54: 77-82

Sadick et al Combined high ligation and stab avulsion for varicose veins in an outpatient setting. Dermatol Surg 1998 ;24:475-9

Pittaluga et al Midterm results of the surgical treatment of varices by phlebectomy with conservation Of a refluxing trunk J Vasc Surg 2009;50: 107-18

10. Traditional Surgery still has good results

Use it following modern concepts!

Rasmussen *Randomized clinical trial comparing endovenous laser and stripping of the great saphenous vein J Vasc Surg 2013*
✓Equal incidence of recurrence between surgery and EVLA

Van den Velden *Five years results of a randomized clinical Trial of Conventional surgery, endovenous laser ablation and ultrasound-guided Sclerotherapy in patients with great saphenous varicose veins Br J Surg 2015*
✓Equal incidence of recurrence between surgery and EVLA; > UFGS

J. Britenden *A Randomized trial comparing treatments for varicose veins Class Trial NEJM 2014*
✓Equal clinical results between Surgery, EVLA and UFGS
✓Less efficacy in the ablation of the saphenous trunk for UFGS

I.Flesskamper *Endovenous laser ablation with and without high ligation compared high ligation and stripping: results of a multicentre randomized controlled trial with up to six years follow- up Phlebology 2014*
✓Equal results at 6 years



Conclusions

To be competitive surgery must:

- Be guided by a very accurate pre-operative ecocolor doppler exam**
- Be less aggressive**
- At low cost**
- Be done on an ambulatory setting**

*Thanks for your
attention*

Patrizia Pavei

