

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES IN VASCULAR SURGERY

JANUARY 19-21 2017

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER

PARIS, FRANCE



How to prevent recurrences and complications after surgery for varicose veins

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How to prevent recurrences and complications after surgery for varicose veins



The diagnosis and management of varicose veins
Issued: July 2013

- 1. Offer Endothermal Ablation**
- 2. If unsuitable offer UGFS**
- 3. If unavailable offer Surgery**



How to prevent recurrences and complications after surgery for varicose veins

- Recurrence rate after surgery 20-30%
- Causes of REVAS
 - 29% technical or tactical errors
 - 29% neovascularizations

More than 50% of recurrent varicose veins originates from the previously operated SF Junction



How to prevent recurrences and complications after surgery for varicose veins

- **How to reduce the incidence of REVAS:**
 1. accurate initial diagnosis to reduce tactical recurrences
 2. To be performed by trained surgeons to reduce technical recurrences
 3. Closure of the fossa ovalis
 4. Suture of the sapheno-femoral junction exposed endothelium with a non absorbable suture
 5. Stripping by invagination



How to prevent recurrences and complications after surgery for varicose veins

Perform less invasive surgical procedures when indicated

**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. Brittenden *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



How to prevent recurrences and complications after surgery for varicose veins

- **COMPLICATIONS**

- DVT
- Damage of the saphenous or sural nerve
- Infections
- Haematomas
- Haemorrhage
- Vascular lesions (very rare)



How to prevent recurrences and complications after surgery for varicose veins

- DVT

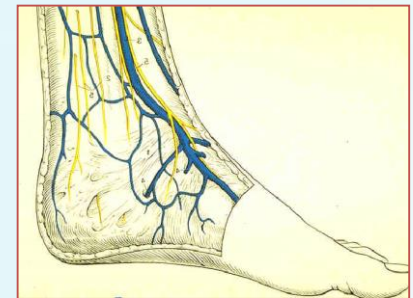
- Incidence of about 1% : the routinely use of LMWH is not justified: to be given in stratified or at risk patients
- There is also evidence to suggest that those patients given DVT prophylaxis were not necessarily protected from the development of a DVT. One study reported that of the 20 out of 377 patients that developed a DVT, 14 had received prophylactic subcutaneous low molecular weight heparin.
- Immediate deambulation and Elastic stocking are the first mean of prevention



How to prevent recurrences and complications after surgery for varicose veins

- How to prevent neurological damages

Stripping to the malleolus		
Wellwood	1975	23-50%
Koyano	1988	27.7 %
Rutgers	1994	33 %
Stripping to the knee		
Negus	1986	4.2 %
Rinvlin	1991	8.0 %
Kahn	1996	5.0 %





How to prevent recurrences and complications after surgery for varicose veins

- How to prevent neurological damages
 - Perform tailored stripping
 - Use an invaginating technique
 - Use a delicate dissection at the malleolus



How to prevent recurrences and complications after surgery for varicose veins

Small saphenous vein	High ligation/Stripping
DVT	1,8 - 3,5 %
Sural nerve damage	2,1%
Paresthesias	1,7 - 34 %
numbness	28%

Tellings S.S., et Al. Phlebology. 2011 Feb 27.



How to prevent recurrences and complications after surgery for varicose veins

- Infections

- Delicate dissection
- The systematic use of antibiotics is not indicated
- In case of large dissections or at risk patients a short-term prophylaxis may be indicated



How to prevent recurrences and complications after surgery for varicose veins

- **Vascular Injuries**

<i>Lesion</i>	<i>Pz.</i>	<i>%</i>	<i>Mortality</i>
Arterial damage	44		0 %
Arterial stripping		31,8 %	
Amputation		34 %	
Venous lesions	43		16,6 %
CFV damage		65.1 %	
CFV stripping		9.3 %	

***Iatrogenic vascular injuries in varicose vein surgery:
a systematic review***



How to prevent recurrences and complications after surgery for varicose veins

- How to prevent recurrences and complications?
 - » Ambulatory basis
 - ↓
 - » Local - tumescent anaesthesia
 - ↓
 - » Delicate surgical act
 - ↓
 - » Lower incidence of complications



- *Thank you for your attention*

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Patrizia Pavei