

Ap

CONTROVERSIES & UPDATES IN VASCULAR SURGERY

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Reversibility test of the SV reflux: how to carry it and why ?

P. Pittaluga, S. Chastanet



DISCLOSURE OF INTEREST

I do not have any relevant financial relationships with any commercial interest



How to carry on the reversibility test ?

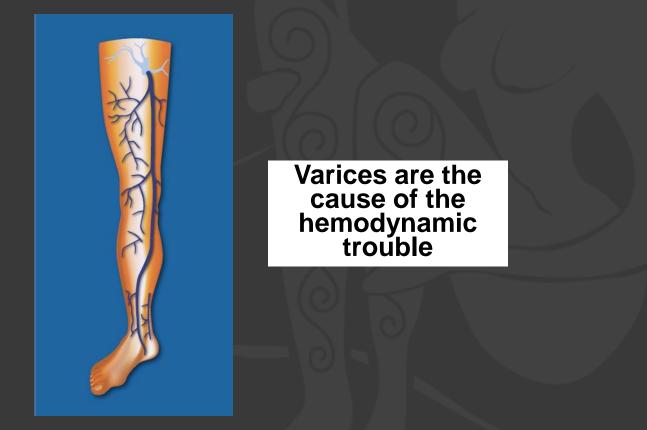




Why doing the reversibility test ?



The ASVAL method is based on the ascending evolution concept of the varicose disease



Predictive test for the reversibility of the reflux ?



IN VASCULAR SURGE

Predictive Value of a Preoperative Test for the Reversibility of the Reflux After Phlebectomy with Preservation of the Great Saphenous Vein

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IOURNAL OF VASCU Abstracts 105 ENOUS AND LYMPHATIC DISORDERS Volume 2, Number 1

✓ **Prospective study**:

- Successive inclusion of all patients opereted on by ASVAL with a GSV reflux . •
- Reversibility test (RT) systematically performed in preop :



Data: \checkmark

- USDS preop, 1 yr, 2 yrs
- Symptoms evaluation (Venous Disability Score) ٠
- Cosmetic evaluation •

	n	%
Patients	249	
Limbs	293	
Mean age (yrs)	52.7 (20-83)	
Female	185	74.3%
C0-C1	0	0%
C2	251	85.7%
C3	15	5.1%
C4-C6	27	9.2%
Symptomatic	193	65.9 %
SFJ mean diameter (mm)	7.1	3-14
GSV reflux	293	100 %
Positivity of the reverbility test	165	56.3 %

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Positivity of the RT correlated with preop CVI stage

Pre-op	Test -	Test +	Р
Female	62.8 %	83.8 %	0.03
CEAP C3-C6	27.3 %	4.2 %	0.01
Symptomatic	78.9 %	55.8 %	0.01
SFJ mean diameter (mm)	7.9	6.4	0.01
SFJ reflux (term and/or preterm)	94.5 %	75.8 %	0.01



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SV persistence	Test -	Test +	р
1 yr	11.2 %	4.5 %	0.04
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2 yrs			14.3 %		5.3 %	0.03	
	Sensibility	S	pecificity	5	PPV	NPV	
1 an	60 %	50 %			73 %	36 %	
2 ans	70 %		56 %		95 %	14 %	

	SV persistence		Test -		Test +	р	
1 yr			11.2 %		4.5 %	0.04	
2 yrs			14.3 %		5.3 %	0.03	
	Sensibility	S	pecificity	5	PPV	NPV	
1 an	60 %	50 %			73 %	36 %	
2 ans	70 %		56 %		95 %	14 %	



Symptoms improvement

Absence of improvement	Test -	Test +	р
1 yr	15.5 %	12.9 %	0.5
2 yrs	20.6 %	13.6 %	0.2

No difference



Symptoms improvement

Absence of improvement	Test -	Test +	р
1 yr	15.5 %	12.9 %	0.5
2 yrs	20.6 %	13.6 %	0.2

No difference

Cosmetic improvement

Absence d'amélioration	Test -	Test +	р
1 an	9.1 %	5.8 %	0.3
2 ans	11.1 %	6.8%	0.3
No difference			



Value of the Reversibility Test

- Fair sensitivity and excellent PPV (95%)
 - ✓ When the RT is positive => reliable for the postop abolition of the reflux
 → RT+ => major criteria for the choice of SV preservation +++

- Poor specificity and NPV
 - Difficulty or impossibility to realize the RT in presence of multiple varicose tributaries +++
 - Abolition of the SV reflux possible after the treatment of all varicose tributaries

RT - => Not enough to choose the SV ablation



Value of the Reversibility Test

- RT not correlated to the clinical outcomes
 - ✓ RT based on hemodynamics
 - \checkmark The fonctional and cosmetic evaluation is subjective
- Good clinical outcomes even in case of RT : could be explained by the treatment of the varicose reservoir
 - ✓ Varicose reservoir ablation: decrease of the saphenous reflux (Eur J Vasc Endovasc Surg 2010; 40, 122-128)
 - ✓ Decrease of reflux volume: symptoms improvement (*Jvs* 2009; 50:107-118)
 - Ablation of varicose tributaries: cosmetic improvement (*Jvs 2009; 50:107-118*)



The preop positivity of the RT is correlated to the hemodynamic improvement after ASVAL with a good positive predictive value.

Therefore a preop positivity of the RT should lead to the preservation of the SV according to the ASVAL principles.

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Therefore a preop positivity of the RT should lead to the preservation of the SV according to the ASVAL principles.

However the preop negativity of the RT doesn't mean he systematic SV ablation since good hemodynamic and clinical results have been observed after ASVAL despite a preop negative RT.

Other criteria such as SV diameter, extension of reflux, nb of varicose tributaries, presence of skin changes should be taken into account.

Thank you for your attention