



**PC** Journées  
& Réunionnaises  
Plaies et Cicatrisations

*La passion des plaies...*

6<sup>eme</sup>  
Édition

# LE POINT DE VUE DU CHIRURGIEN

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**28 & 29 avril 2023 - Stella Matutina**



## Déclaration de lien d'intérêt

Je ne déclare pas de lien d'intérêt en rapport avec cette présentation.



# INSUFFISANCE VEINEUSE

- ❑ 20 à 35% de la population Française
- ❑ 2 à 3% des dépenses de santé
- ❑ CNAM 2013 : 264 millions d'euros
- ❑ 47 -52% des ulcères

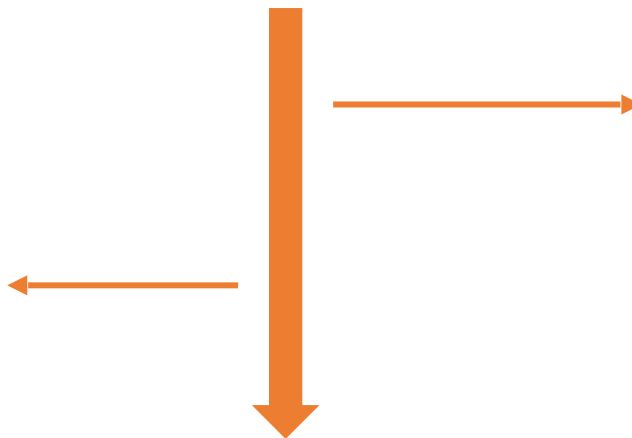
*Données HAS 2016*



# INSUFFISANCE VEINEUSE



Télangiectasie



Ulcère chronique





6<sup>ème</sup>  
Édition

# INSUFFISANCE VEINEUSE

Aucun traitement local ne peut réussir si le traitement étiologique n'est pas entrepris



# INDICATIONS

## ECHOGRAPHIE DOPPLER

**C0**

No visible or palpable signs of venous disease



**C1**

Telangiectasia or reticular veins



**C2**

Varicose Veins



**C3**

Edema



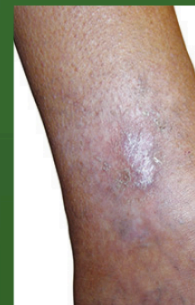
**C4**

Pigmentation: Skin changes assigned to venous disease



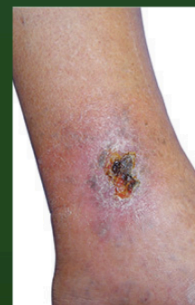
**C5**

Healed venous leg ulcer



**C6**


Active venous ulcer







# INDICATIONS

<p><b>C0</b> No visible or palpable signs of venous disease</p> 	<p><b>C1</b> Telangiectasia or reticular veins</p> 	<p><b>C2</b> Varicose Veins</p> 	<p><b>C3</b> Edema</p> 	<p><b>C4</b> Pigmentation: Skin changes assigned to venous disease</p> 	<p><b>C5</b> Healed venous leg ulcer</p> 	<p><b>C6</b> Active venous ulcer</p> 
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# INDICATIONS

<p><b>C0</b> No visible or palpable signs of venous disease</p> 	<p><b>C1</b> Telangiectasia or reticular veins</p> 	<p><b>C2</b> Varicose Veins</p> 	<p><b>C3</b> Edema</p> 	<p><b>C4</b> Pigmentation: Skin changes assigned to venous disease</p> 	<p><b>C5</b> Healed venous leg ulcer</p> 	<p><b>C6</b> Active venous ulcer</p> 
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<p><b>C0</b> No visible or palpable signs of venous disease</p> 	<p><b>C1</b> Telangiectasia or reticular veins</p> 	<p><b>C2</b> Varicose Veins</p> 	<p><b>C3</b> Edema</p> 	<p><b>C4</b> Pigmentation: Skin changes assigned to venous disease</p> 	<p><b>C5</b> Healed venous leg ulcer</p> 	<p><b>C6</b> Active venous ulcer</p> 
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# RADIOFRÉQUENCE

## PRINCIPE

- ❑ Réaction thermique du collagène
- ❑ Déconnexion structure hélicoïdale et du maintien des ponts intramoléculaires
- ❑ Contraction et épaissement des fibres collagènes de l'adventice

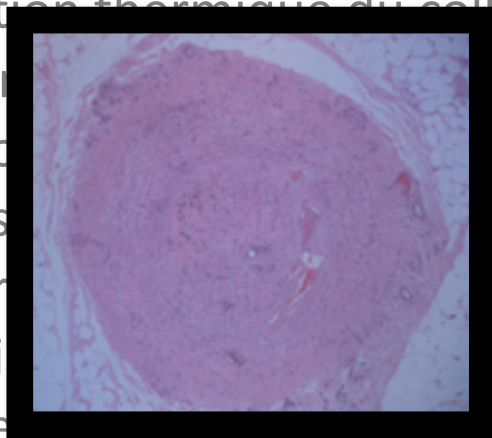




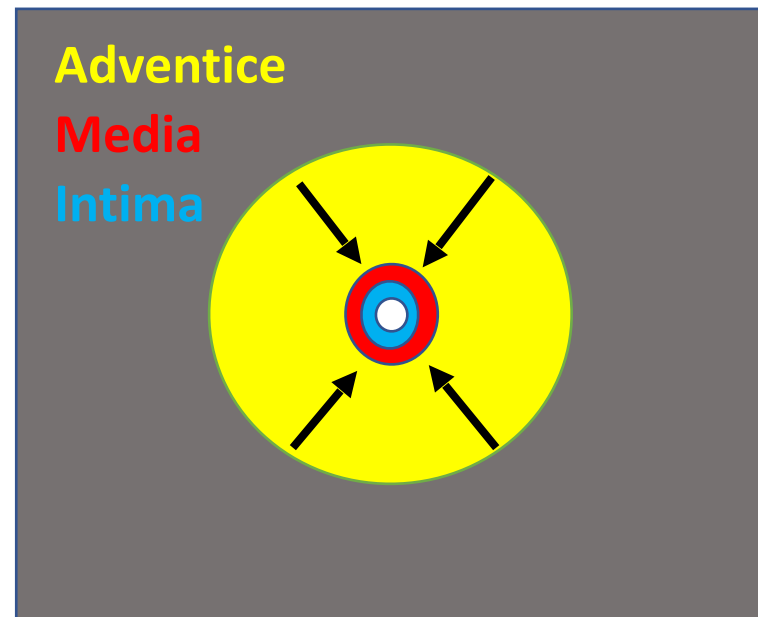
# RADIOFRÉQUENCE

## PRINCIPE

- ❑ Réaction thermique du collagène
- ❑ Décoloration des ponts hélico
- ❑ Contrôle des fibres de l'adventice



Kei Hayashi et al. *Am J Sport Med* 1997; 25:107-12







# AVANTAGES

- Locale pure possible
- Mini invasif
  - cicatrices
  - douleurs
- arrêts de travail
- Pas plus de récurrence qu'avec le stripping





# TAUX D'OCCLUSION

**Five-year results from the prospective European multicentre cohort study on radiofrequency segmental thermal ablation for incompetent great saphenous veins**

T. M. Proebstle<sup>1</sup>, B. J. Alm<sup>2</sup>, O. Göckeritz<sup>3</sup>, C. Wenzel<sup>3</sup>, T. Noppeney<sup>4</sup>, C. Lebard<sup>5</sup>, C. Sessa<sup>6</sup>, D. Creton<sup>7</sup> and O. Pichot<sup>6</sup>

*British Journal of Surgery, Volume 102, Issue 3, February 2015, Pages 212–218,*

311 patients, 346 jambes  
Suivi 60 mois  
Taux occlusion RF: **96,2%**

*[JVS Volume 6, Issue 1, January 2018, Pages 31-40](#)*

225 patients, 295 jambes  
Taux occlusion RF : 92%  
Absence reflux 5 ans : 95%

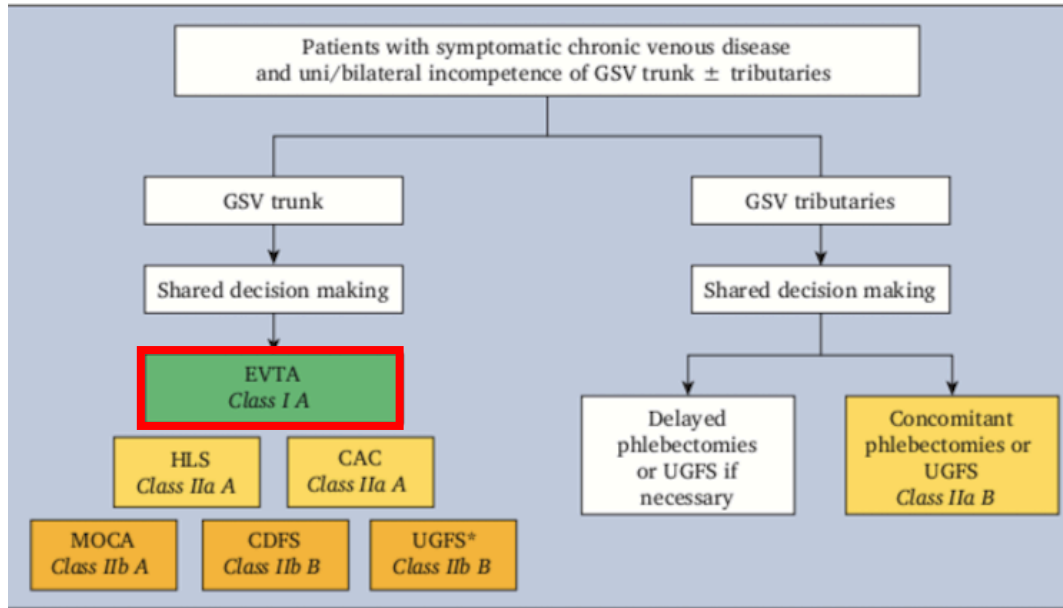
Prospective comparative cohort study evaluating incompetent great saphenous vein closure using radiofrequency-powered segmental ablation or 1470-nm endovenous laser ablation with radial-tip fibers (Varico 2 study)

James A. Lawson MD, PhD<sup>a, b, c</sup>, Stefanie A. Gauw CRC<sup>a</sup>, Clarissa J. van Vlijmen MD, PhD<sup>a</sup>, Pascal Pronk MD<sup>a</sup>, Menno T.W. Gaastra MD<sup>a</sup>, Marco J. Tangelder MD, PhD<sup>b</sup>, Michael C. Mooij MD<sup>a</sup>



# Editor's Choice – European Society for Vascular Surgery (ESVS) 2022 Clinical Practice Guidelines on the Management of Chronic Venous Disease of the Lower Limbs<sup>☆</sup>

## GRANDE VEINE SAPHÈNE



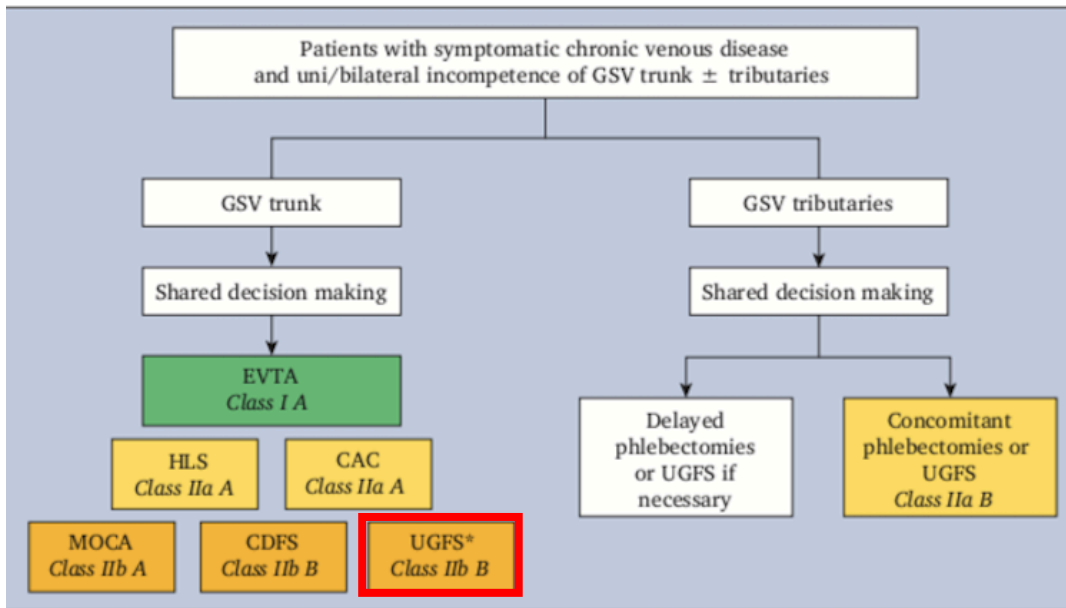
Recommendation 28		Unchanged	
For patients with great saphenous vein incompetence requiring treatment, endovenous thermal ablation is recommended as first choice treatment, in preference to high ligation/stripping and ultrasound guided foam sclerotherapy.			
Class	Level	References	ToE
I	A	Siribumrungwong <i>et al.</i> (2012), <sup>198</sup> Rasmussen <i>et al.</i> (2013), <sup>175</sup> Hamann <i>et al.</i> (2017), <sup>201</sup> Kheirelseid <i>et al.</i> (2018), <sup>202</sup> Brittenden <i>et al.</i> (2019), <sup>129</sup> Cao <i>et al.</i> (2019) <sup>195</sup>	

=> 1<sup>ère</sup> intention



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# GRANDE VEINE SAPHÈNE



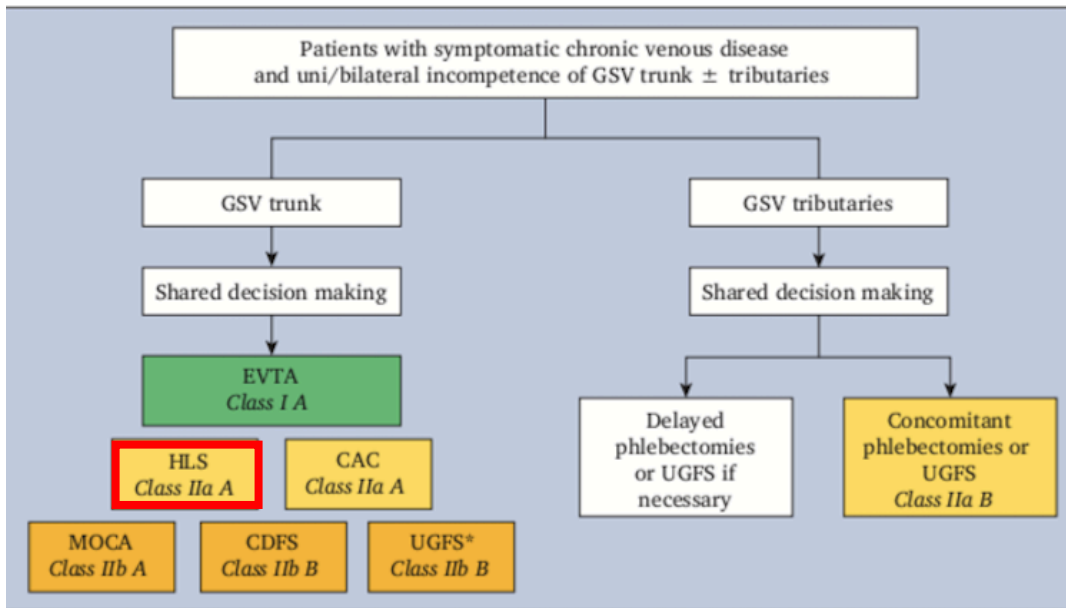
Recommendation 31 <span style="float: right;">New</span>			
For patients with saphenous trunk incompetence undergoing treatment, ultrasound guided foam sclerotherapy may be considered for treating saphenous trunks with a diameter less than 6 mm.			
Class	Level	References	ToE
IIb	B	Myers et al. (2007), <sup>164</sup> Shadid et al. (2015), <sup>221</sup> Venermo et al.(2016) <sup>222</sup>	

=> ESM si < 6 mm



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## GRANDE VEINE SAPHÈNE



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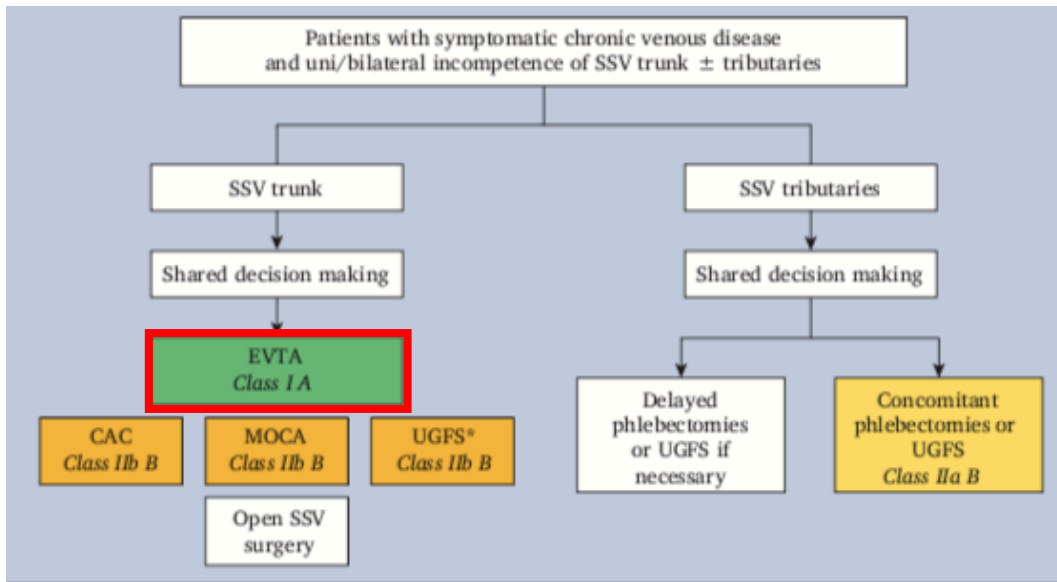
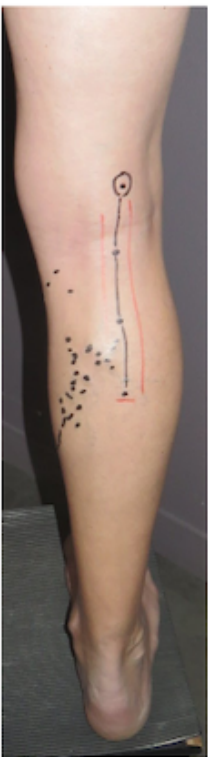
Recommendation 35 <span style="float: right;">New</span>			
For patients with great saphenous vein incompetence requiring treatment, high ligation stripping should be considered, if endovenous thermal ablation options are not available.			
Class	Level	References	ToE
IIa	A	O'Donnell <i>et al.</i> (2016), <sup>177</sup> Hamann <i>et al.</i> (2017), <sup>201</sup> Kheirleiseid <i>et al.</i> (2018) <sup>202</sup>	

=> Stripping 2<sup>ème</sup> intention



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## PETITE VEINE SAPHÈNE



Recommendation 43		Changed	
For patients with small saphenous vein incompetence requiring treatment, endovenous thermal ablation is recommended in preference to surgery or foam sclerotherapy.			
Class	Level	References	ToE
I	A	Doganci <i>et al.</i> (2011), <sup>142</sup> Paravastu <i>et al.</i> (2016), <sup>293</sup> Boersma <i>et al.</i> (2016) <sup>288</sup>	

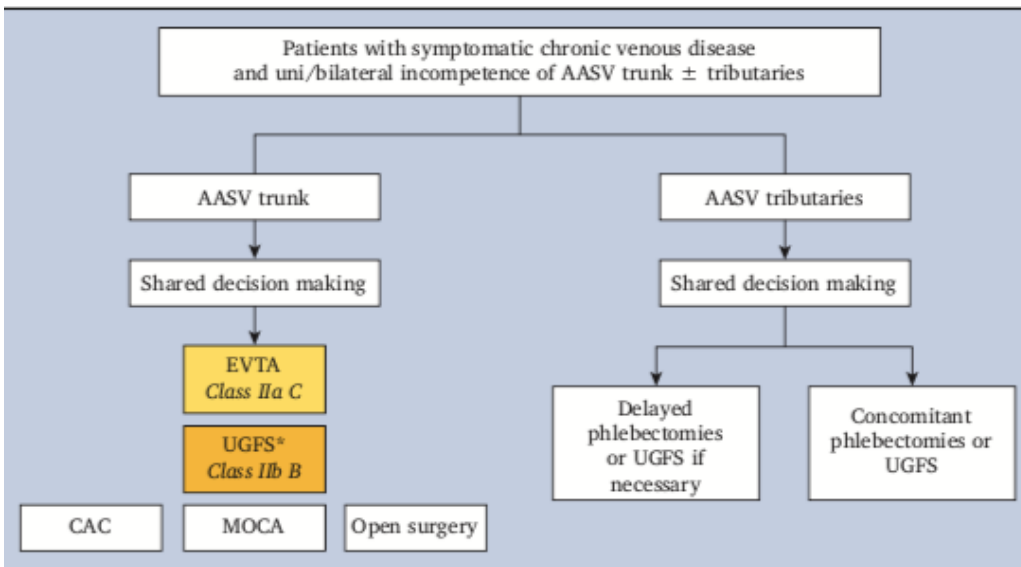
=> 1<sup>ère</sup> intention





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# VEINE SAPHÈNE ACCESSOIRE ANTERIEURE



Recommendation 46				New
For patients with incompetence of the anterior accessory saphenous vein requiring treatment, endovenous thermal ablation should be considered.				
Class	Level	References	ToE	
IIa	C	Theivacumar <i>et al.</i> (2009), <sup>302</sup> King <i>et al.</i> (2009) <sup>303</sup>		

Recommendation 47				New
For patients with incompetence of the anterior accessory saphenous vein requiring treatment, ultrasound guided foam sclerotherapy may be considered.				
Class	Level	References	ToE	
IIb	C	Bradbury <i>et al.</i> (2010) <sup>304</sup>		

=> RF ou ESM





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## LES VEINES DE GROS DIAMÈTRE

Recommendation 53		New	
For patients with an incompetent great saphenous vein with a very large truncal diameter (more than 12 mm), endovenous thermal ablation should be considered.			
Class	Level	References	ToE
Ia	C	Dabbs <i>et al.</i> (2018), <sup>327</sup> Woo <i>et al.</i> (2019) <sup>328</sup>	



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## LA RÉCIDIVE

Recommendation 55		Unchanged	
For patients with symptomatic recurrent varicose veins due to saphenous trunk incompetence, endovenous thermal ablation or ultrasound guided foam sclerotherapy with or without phlebectomy should be considered.			
Class	Level	References	ToE
Ila	B	Hinchliffe <i>et al.</i> (2006), <sup>351</sup> Theivacumar <i>et al.</i> (2011), <sup>352</sup> van Groenendaal <i>et al.</i> (2009), <sup>349</sup> van Groenendaal <i>et al.</i> (2010), <sup>348</sup> Nwaejike <i>et al.</i> (2010), <sup>350</sup> Darvall <i>et al.</i> (2011) <sup>354</sup>	

Recommendation 56		Unchanged	
For patients with symptomatic recurrent varicose veins requiring treatment, where endovenous ablation is possible, re-exploration of the groin or popliteal fossa is not recommended.			
Class	Level	References	ToE
III	B	Hinchliffe <i>et al.</i> (2006), <sup>351</sup> van Groenendaal <i>et al.</i> (2009), <sup>349</sup> van Groenendaal <i>et al.</i> (2010) <sup>348</sup>	

Recommendation 57		New	
For patients with symptomatic recurrent varicose veins without truncal incompetence, ultrasound guided foam sclerotherapy and/or ambulatory phlebectomy should be considered.			
Class	Level	References	ToE
Ila	C	Consensus	

- ⇒ RF ou ESM
- ⇒ En l'absence d'incontinence : ESM ou phlébectomies



# CONCLUSION

- Ttt **étiologique** impératif
- Technique **simple** standardisée, locale possible
- Taux **occlusion** > 96 %
- **GOLD STANDARD** dans tous les territoires (recos ESVS 2022)

