

Congresso Nazionale SIFL – Ferrara – 20-22 Ottobre 2016

TRENTENNALE DELLA FONDAZIONE



Le recidive della REGIONE (Safeno)Poplitea Come diagnosticarle e quale terapia EBM

Leonardo Corcos

Membro Fondatore della SIFL

Con la collaborazione di Daniele Pontello, Elio Ferlaino, Tommaso Spina

Incidenza di varici della Regione Safeno-Poplitea (RSP) +/- insufficienza della Vena Piccola Safena (VPS)

Studi ECD

Associata ad altri reflussi dal 36,6 % al 42%

Isolata dal 3.7% al 28.5%

Labropoulos N¹, Giannoukas AD, Delis K, et Al. J Vasc Surg. 2000 Nov;32(5):954-60.

Peruzzi G.P., Spina T., Procacci T., De Anna D., Corcos L. Acta Phlebol 2002. 3: 75-83.

Wong JK¹, Duncan JL, Nichols DM. Eur J Vasc Endov Surg. 2003 Mar;25(3):267-75.

Lin JC¹, Iafrati MD, O'Donnell TF Jr, et Al. J Vasc Surg. 2004 May;39(5):1053-8.

Labropoulos N¹, Kokkosis AA, Spentzouris G, et Al. J Vasc Surg. 2010 Jan;51(1):96-103.

Qureshi MI¹, Lane TR, Moore HM, et Al. Phlebology. 2013 Mar;28 Suppl 1:47-50.

Media 20.8%

Incidenza di VARICI RECIDIVE della RSP

Studi ECD / Dissezione chirurgica

dal 3.7% al 50%

- Creton D J Mal Vasc. 1999 Feb;24(1):30-6
Lin JC¹, Iafrati MD, O'Donnell TF Jr, et Al. J Vasc Surg. 2004 May;39(5):1053-8
Corcos L. In Tondi P. Patologie del sistema v. Verducci Ed. Roma 2013: 235-46
Corcos L, Aloisio T, Alonso U, et Al. Acta Phlebol. 2014;15:69-78

Media 21.6%
4.5% della casistica globale

OSSERVAZIONE di VARICI RECIDIVE della RSP

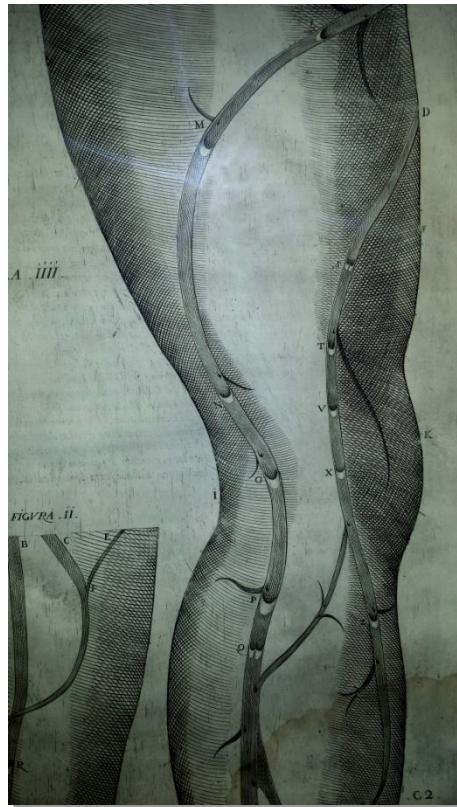
Forse... < 3 % della casistica globale



CASI TRATTATI

Forse... < 2 % della casistica globale

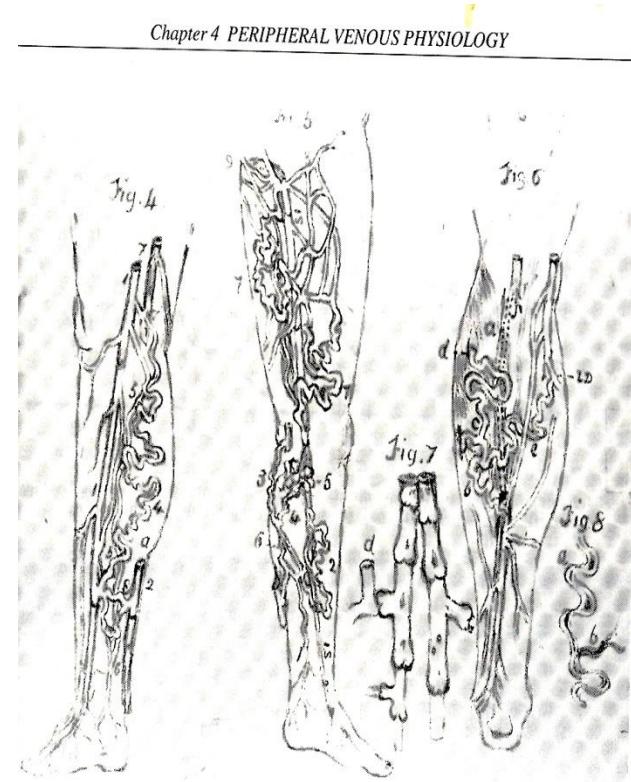
ANATOMIA, VARIANTI & CAUSE DI RECIDIVA



Galen 100 d.C.



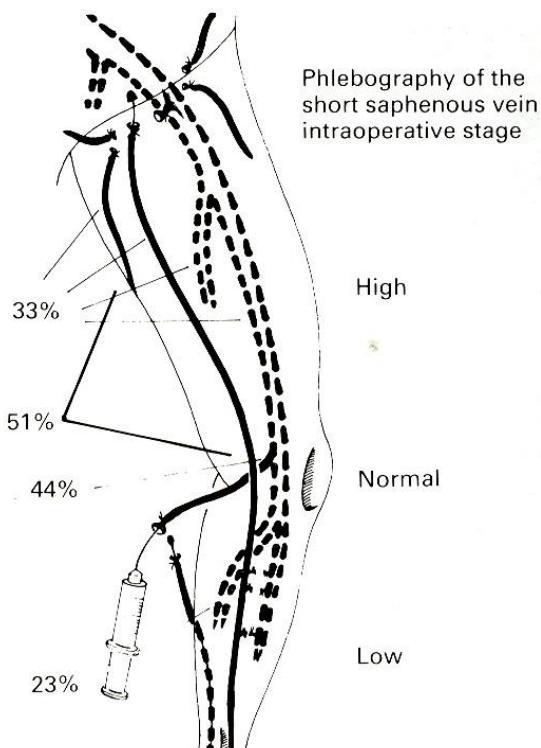
Leonardo 1.554



1867 Gay

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA

264 *L. Corcos et al.*



(Kosinski 1926)

Phlebology (1989) **4**, 259–270.

© The Macmillan Press Ltd. 1989

Considerations of the Anatomical variations in the venous system of the lower limbs in varicose disease

L. Corcos, G.P. Peruzzi, V. Romeo, C. Fiori

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA



Fig. 2 - Intraoperative Selective Phlebography of the SSV. The SSV termination (S) is normally located in the popliteal region with a very thin femoro-popliteal ascending branch (F).

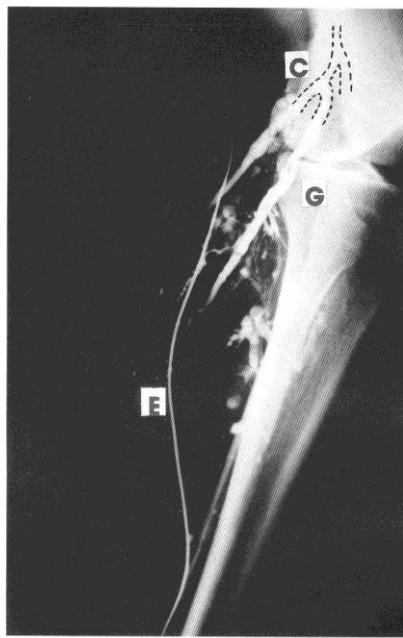


Fig. 3 - Intraoperative Selective Phlebography of the SSV. «Normal terminations» of a common trunk (C) resulting from the conjunction of one gastrocnemial vein (G) with the SSV. An intraluminal Phlebo-extractpr (E) has already been inserted into the long saphenous vein.



Fig. 4 - Intraoperative Selective Phlebography of the SSV. High termination of the SSV which flows directly into an accessory superficial femoral vein above the Hunterian channel (2), while a very thin communicating vein joins the superficial femoral below the Hunterian channel (1).

Phlebologie

© F. K. Schattauer Verlagsgesellschaft mbH (1993)

**L. Corcos, G. Peruzzi,
V. Romeo, C. Fiori***

From the Department of General Surgery (Dir. Pr. F. Carrà) and the Department of Radiology (Dir. Pr. C. Fiori)*, Casa di Cura Villa Donatello, Florence, Italy

Übersichts- und Originalarbeiten

The Anatomical Variables of the Short Saphenous Vein in Surgery

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA



Fig. 1 Example of normal termination

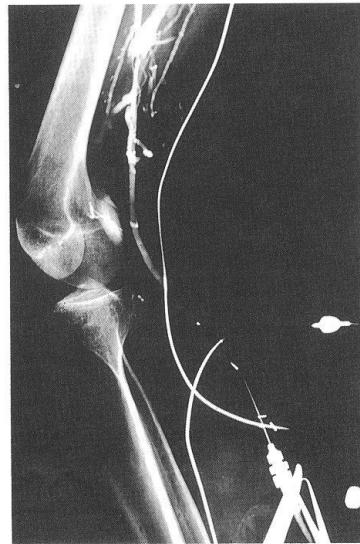


Fig. 2 Example of high termination



Fig. 3 Example of low termination

c. normale 51%

c. alta 26%

c. bassa 23%

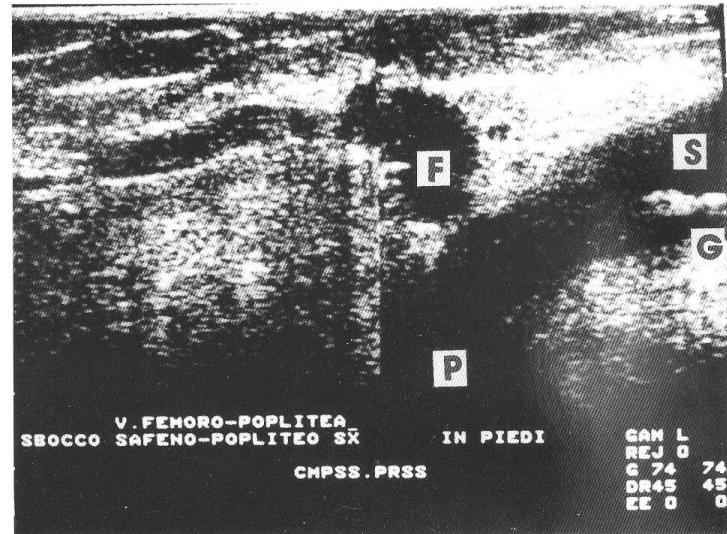


Fig. 1 - High Resolution Echography of the popliteal region in a subject with primary VVLL of the calf. A normal SSV outlet (S) into the popliteal (P) is visible. The SSV insufficiency was not due to a valvular incompetence of the SSV outlet but to an evident femoro-popliteal reflux. The median gastrocnemial (G) vein flowing into the SSV 2 cm. before the SPJ.

V. Giacomini 16%

Corcos L., Macchi C., De Anna D. et Al.

The anatomical variables of the sapheno-popliteal junction. Visualization by radiological and echographic examinations.

Italian Journal Of Anatomy and Embriology. Florence 1996. 101,1,15-28.

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA

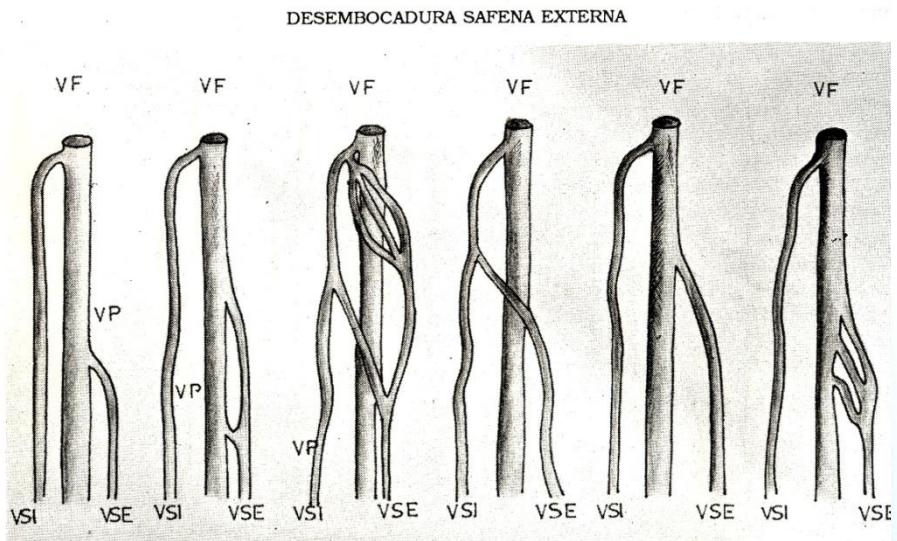
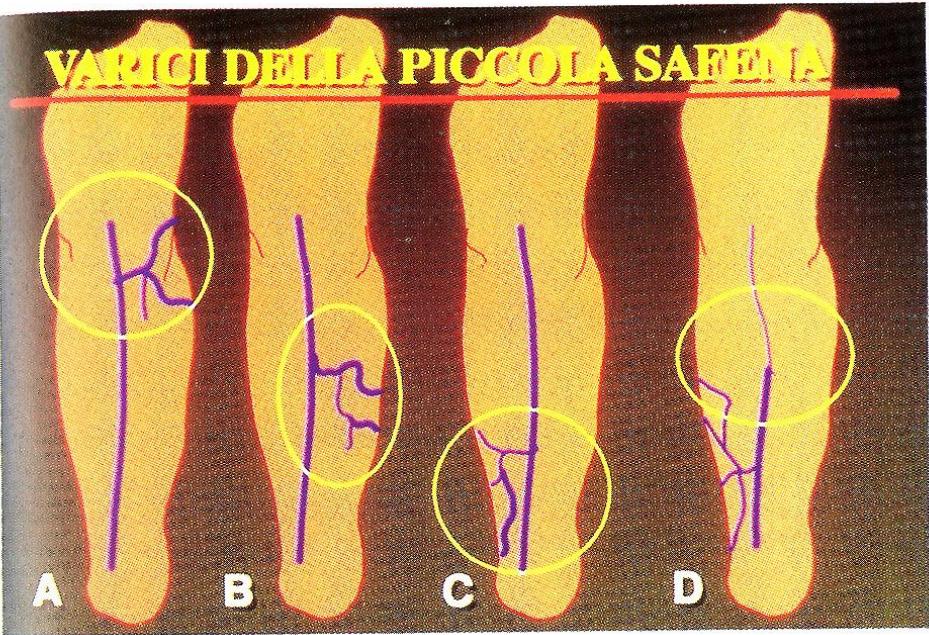


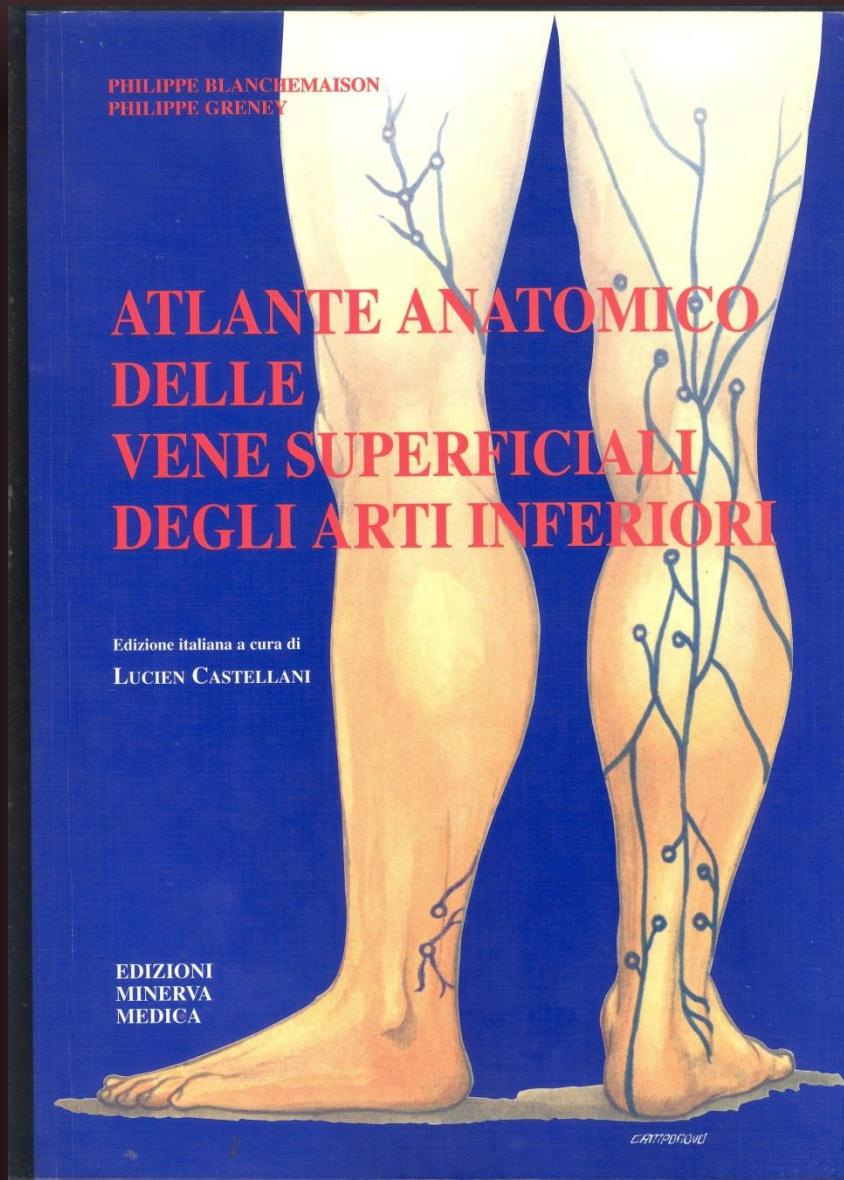
Figura 11: Desembocadura de la vena safena externa.
 V.F. - Vena femoral. V.P. - Vena poplitea. V.S.E. - Vena safena externa. V.S.I. - Vena safena interna.
 En estos dibujos se observan las variaciones anatómicas de la desembocadura de la vena safena externa



Simkin 1991

D'Addato-Stella 1994

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA



Blachemaison

Greney 1997

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA

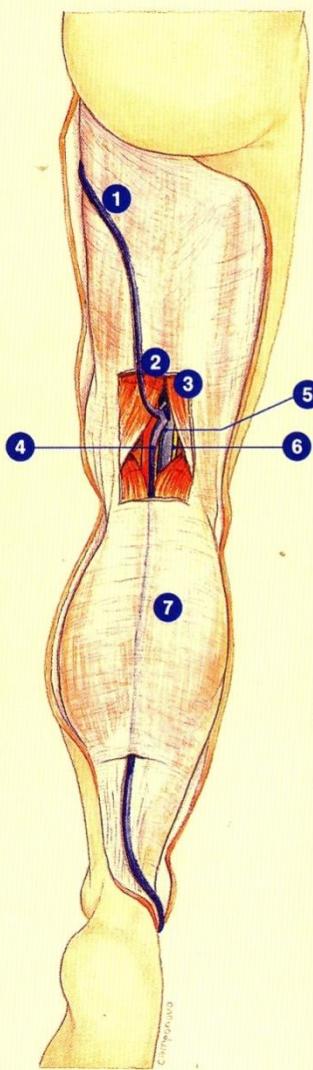
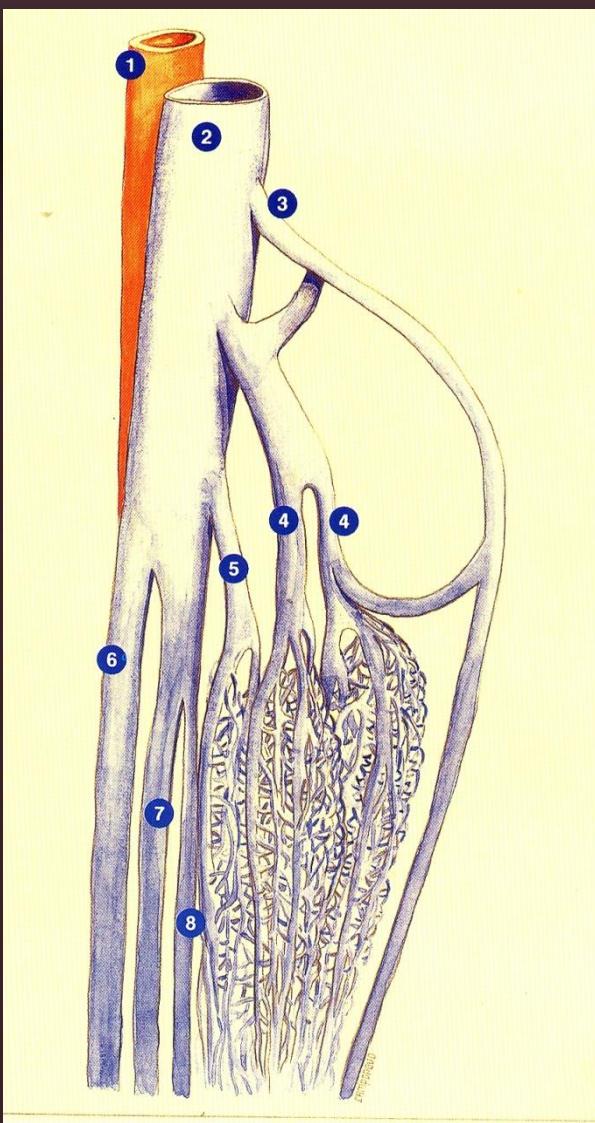


Figura 72: safena esterna: topografia generale.

- ① vena di Giacomini
- ② muscolo semimembranoso
- ③ muscolo bicipite femorale (capo lungo)
- ④ crosse della safena esterna
- ⑤ vena poplitea
- ⑥ nervo tibiale
- ⑦ muscolo gastrocnemio (gemello)



Blachemaison-Greney 1997,

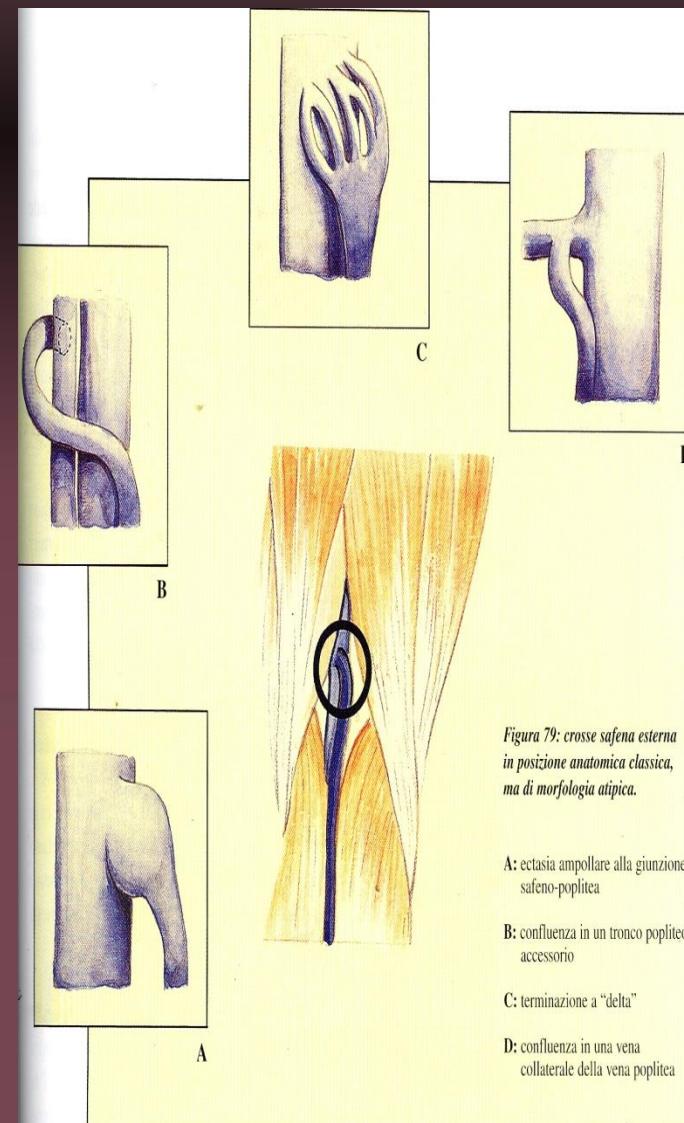


Figura 79: crosse safena esterna in posizione anatomica classica, ma di morfologia atipica.

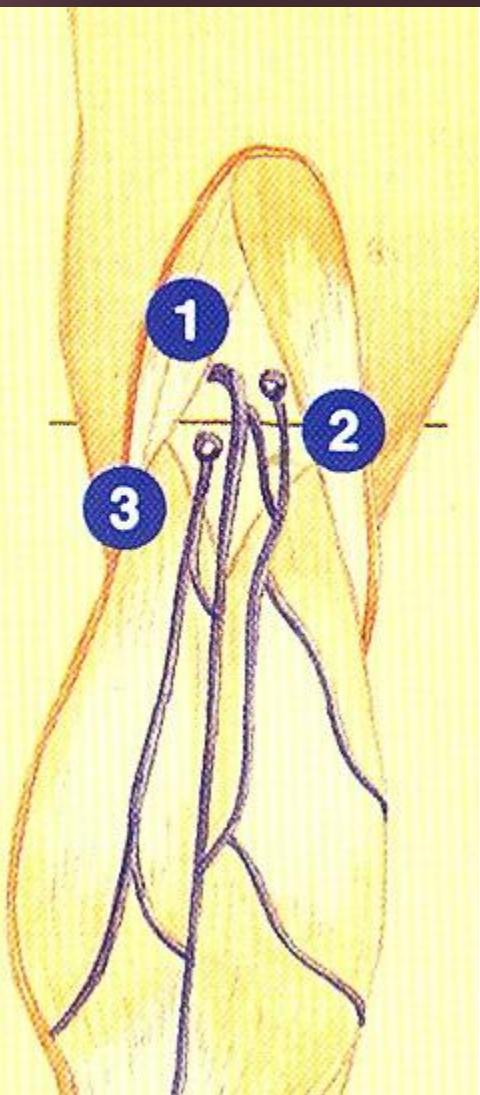
A: ectasia ampollare alla giunzione safeno-poplitea

B: confluenza in un tronco popliteo accessorio

C: terminazione a "delta"

D: confluenza in una vena collaterale della vena poplitea

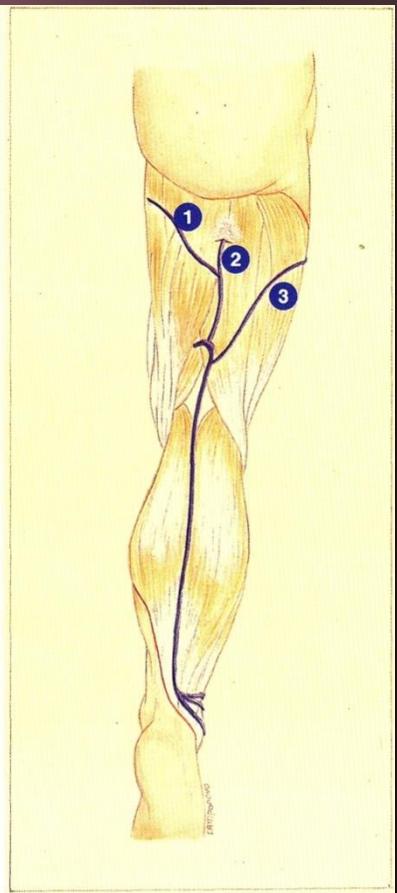
ANATOMIA, VARIANTI & CAUSE DI RECIDIVA



*Figura 77: crosse safena esterna
in posizione anatomica classica.
Reflussi associati del cavo popliteo.*

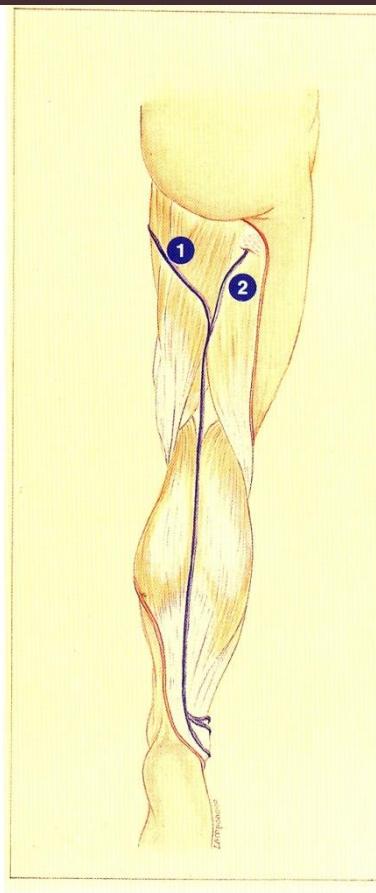
- ① crosse safena esterna
Varianti < 50% >
- ② vena perforante del cavo popliteo
Presente 4% (Thiery 1986, Delis et Al. 2006)
- ③ vena perforante gemellare interna
Presente 4% (Delis et Al. 2006)
13% (Kim et Al. 2012)
0.78% (Nakayama et Al. 2016)

ANATOMIA, VARIANTI & CAUSE DI RECIDIVA



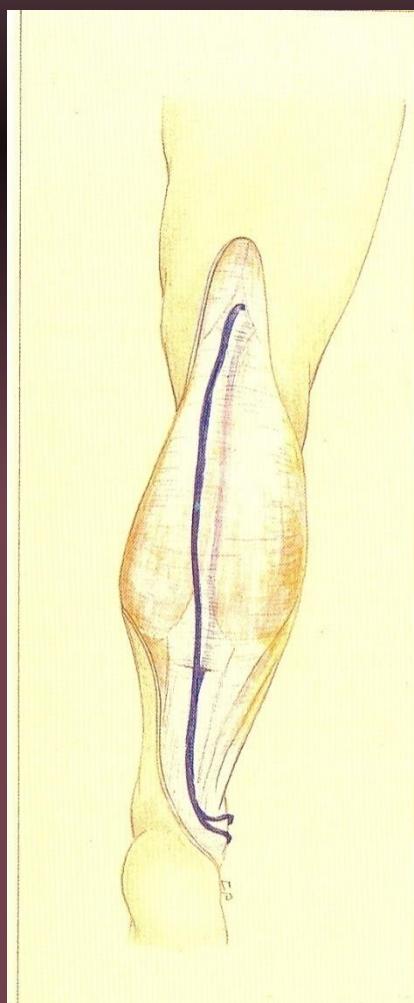
*Figura 80: crosse safena esterna alta.
Reflusso di origine crurale.*

- ① vena di Giacomini o vena perineale
- ② vena perforante glutea o femorale profonda
- ③ sciarpa di coscia (ramo anteriore della safena interna)

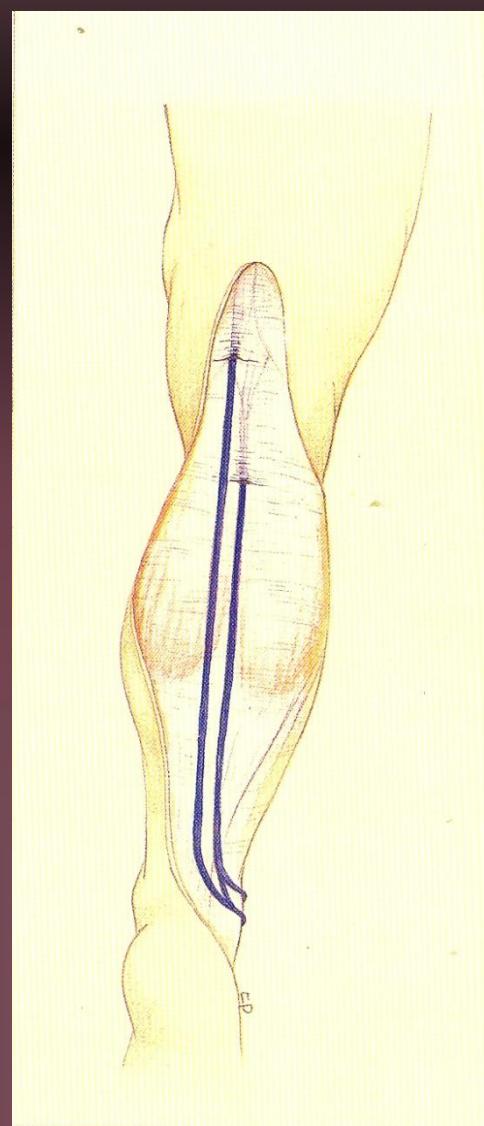


*Figura 81: assenza della crosse
safena esterna.*

- ① confluenza nel tronco safena interna
- ② confluenza nella vena femorale profonda

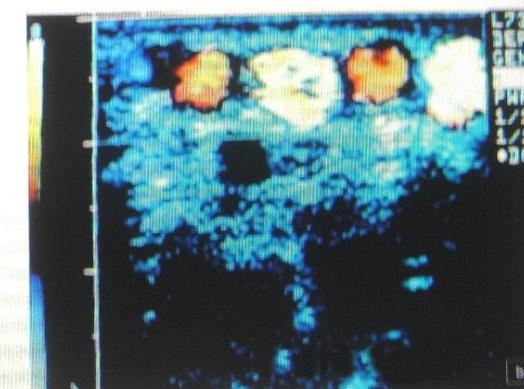
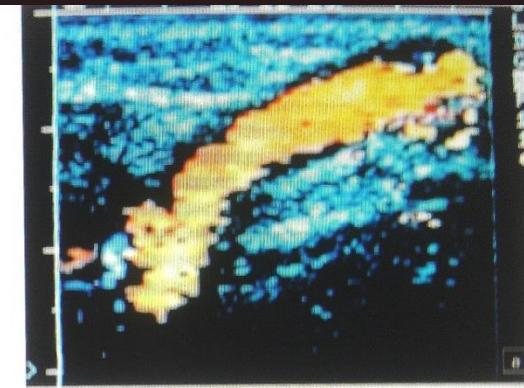


*Figura 87: sdoppiamento safena esterna
in due piani sovrapposti.*



Blachemaison-Greney 1997,

LA VENA PERFORANTE POPLITEA



RX Flebografia

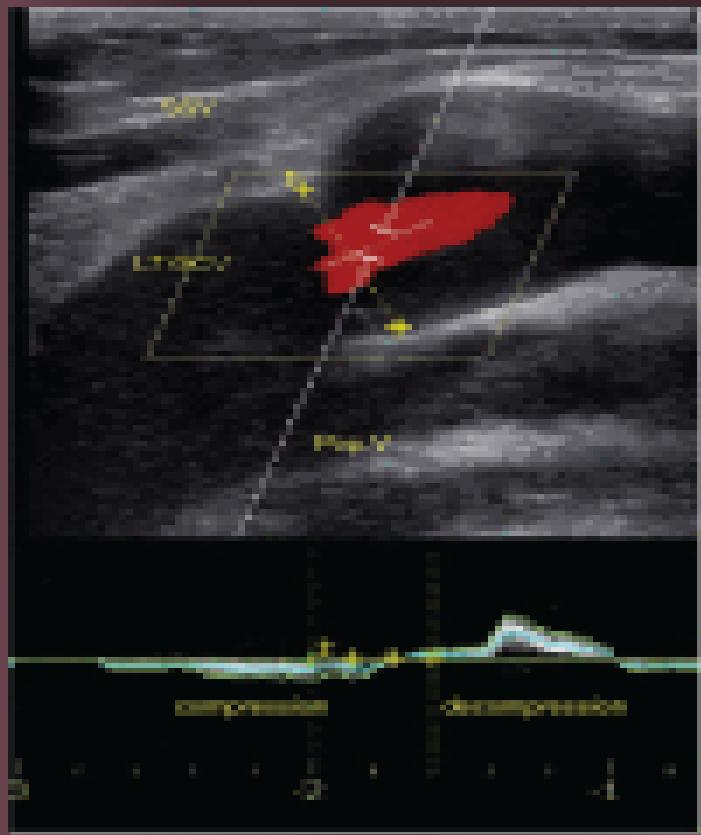
ECD

Oss. Intraoperatoria

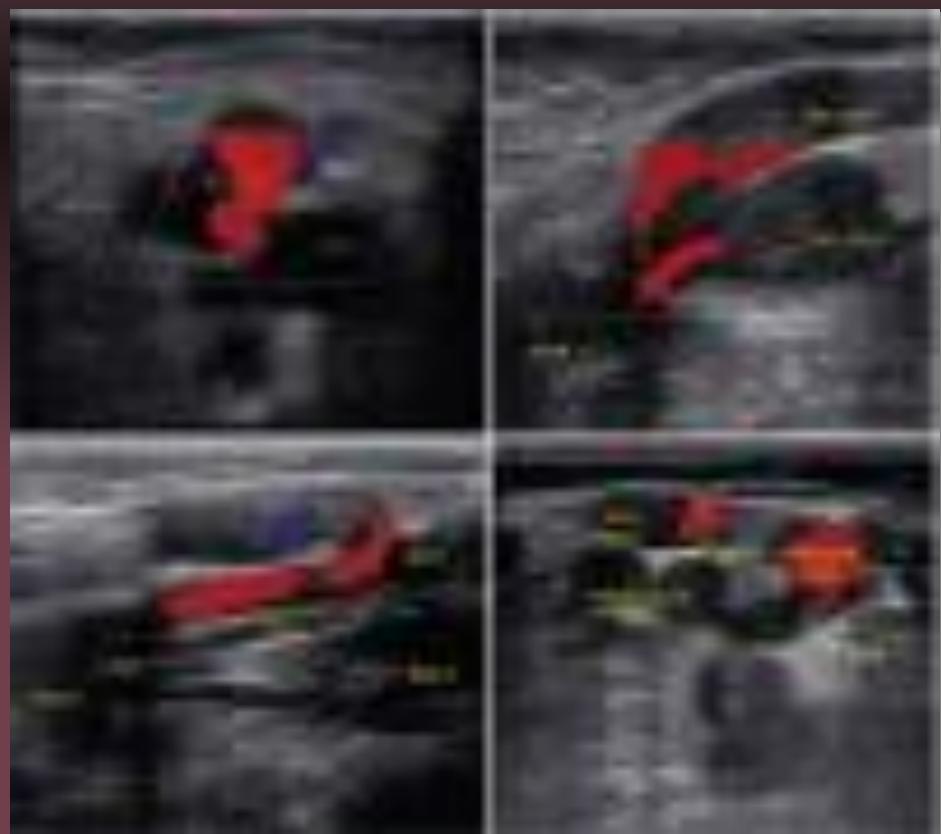
Delis KT, Knaggs AL, Hobbs JT, Vandendriessche MA.

J Vasc Surg 2006 Sep;44(3):611-9.

LA VENA PERFORANTE del GASTROCNEMIO



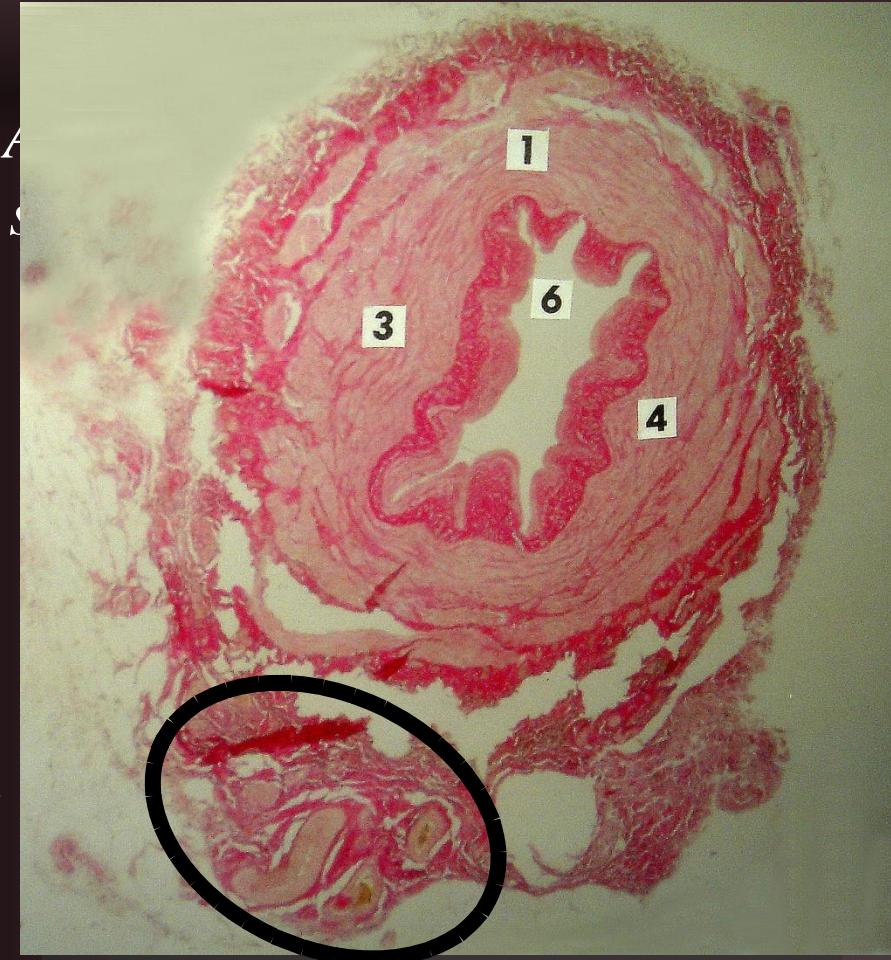
*V. del Gastrocnemio
dilatata e refluente*



*V. del Gastrocnemio
e sua Perforante in VPS*

NERVO & ARTERIA SURALI SUPERFICIALI

*Arteria e Nervo
Surali superficiali*



*Peduncolo
Vascolo-Nervoso*

Corcos L., Peruzzi G., Romeo V., et Al. *Phlebology*. Vol. 4 - Ed. D.Negus, G.Jantet - 1989 : 271-274.
Schweighofer G1, Mühlberger D, Brenner E. *J Vasc Surg*. 2010 Apr;51(4):982-9.
Kerver AL1, van der Ham AC, Theeuwes HP, et Al. *J Vasc Surg*. 2012 Jul;56(1):181-8.
Uhl JF1, Gillot C. *Phlebology*. 2013 Feb;28(1):4-15.

CAUSE DI RECIDIVA in LETTERATURA

- 1 Errore diagnostico**
- 2 Errore chirurgico**
- 3 Ricanalizzazione dopo scleroterapia**
- 4 Ricanalizzazione dopo trattamento endovascolare**
- 5 Neoangiogenesi (*spesso invocata, mai dimostrata*)**

<u>Tong Y1, Royle J. Cardiovasc Surg.</u>	1996 Jun;4(3):364-7.
<u>Rettori R. J Mal Vasc.</u>	1998 Feb;23(1):54-60.
<u>Creton D J Mal Vasc.</u>	1999 Feb;24(1):30-6
<u>Pukacki F¹, Zieliński P, Checiński P, Oszkinis G. Wiad Lek.</u>	2003;56(1-2):28-33.
<u>Lin JC¹, Iafrati MD, O'Donnell TF Jr, et Al. J Vasc Surg.</u>	2004 May;39(5):1053-8.
<u>Perrin M1, Gillet JL. J Mal Vasc.</u>	2006 Dec;31(5):236-46.
<u>O'Donnell TF Jr1, Iafrati MD. Phlebology.</u>	2007;22(4):148-55.
<u>Cina G1, Narese D1, Amicucci V1, et Al. Clin Ter.</u>	2014;165(4):183-6.

CAUSE DI RECIDIVA in LETTERATURA

Errore diagnostico-chirurgico

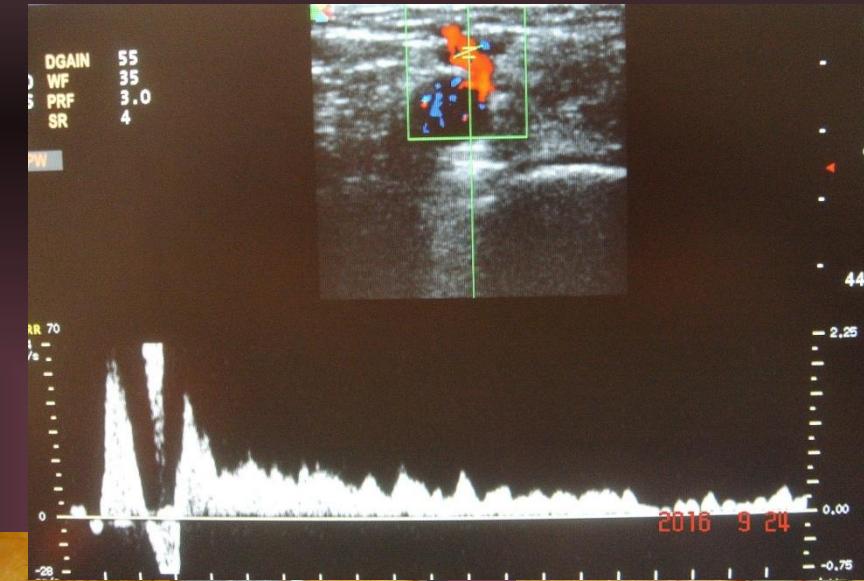
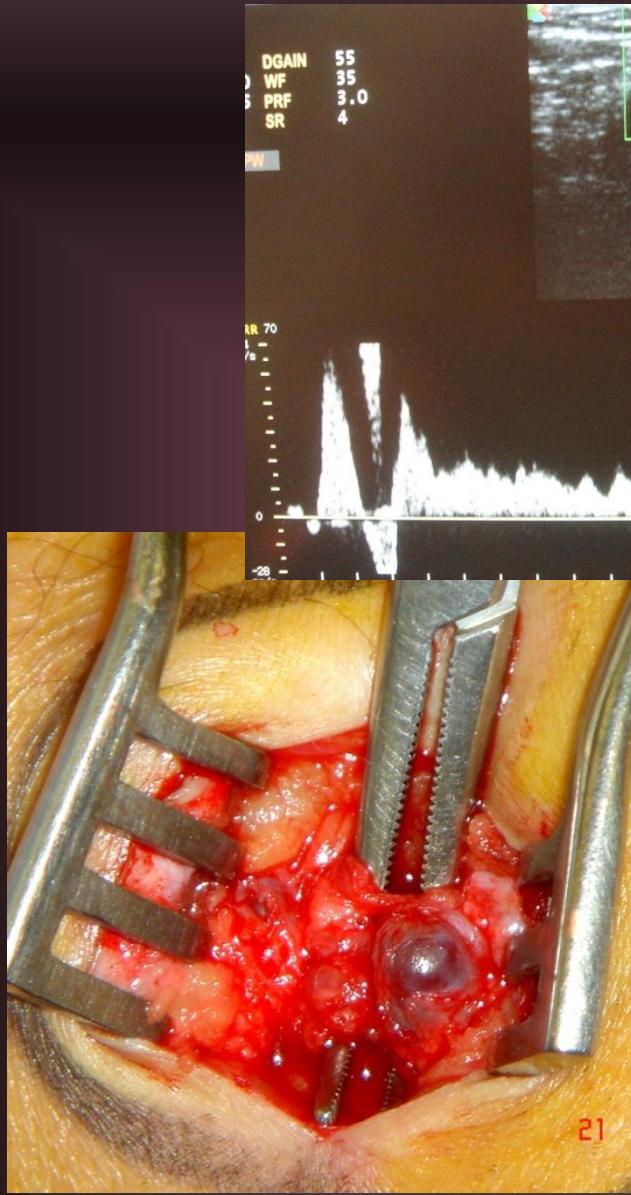
- 1 Tutte le varianti precedenti (*misconosciute*)**
- 2 Moncone VPS residuo con collaterali residue**
- 3 VPS intatta**
- 4 Insufficienza di Vv. Profonde**
- 5 Aneurisma della V. Poplitea**
- 6 Varici del Nervo Sciatico**

<u>Delis KT, Knaggs AL, Hobbs JT, Vandendriessche MA. JVS</u>	<u>2006 44(3):611-9.</u>
<u>Schweighofer G1, Mühlberger D, Brenner E. J Vasc Surg.</u>	<u>2010 Apr;51(4):982-9.</u>
<u>Kim SY1, Park EA, Shin YC, et Al. Phlebology.</u>	<u>2012 Aug;27(5):235-41.</u>
<u>Uhl JF1, Gillot C. Phlebology.</u>	<u>2013 Feb;28(1):4-15.</u>
<u>Nakayama M. Ann Vasc Dis.</u>	<u>2016;9(1):35-41.</u>

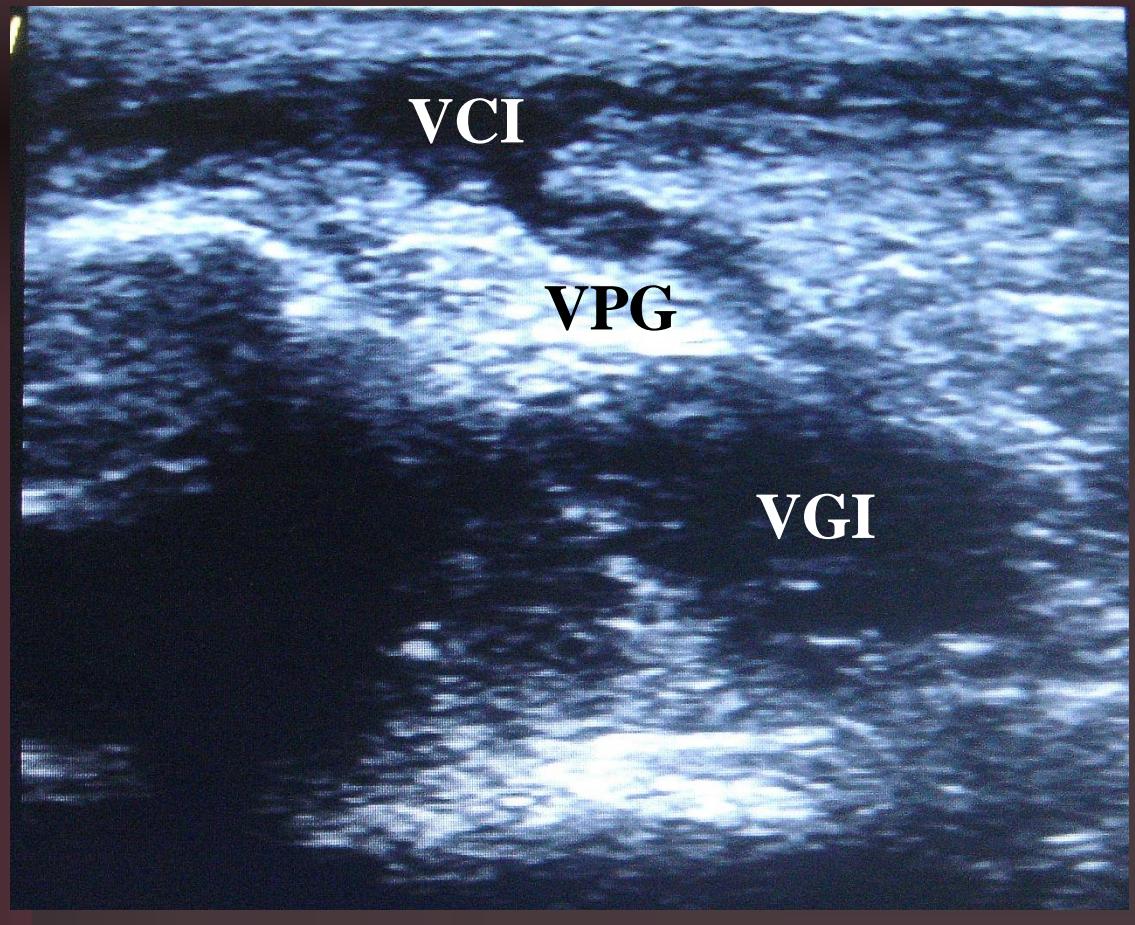
CAUSE DI RECIDIVA nell'esperienza personale



VPS duplice

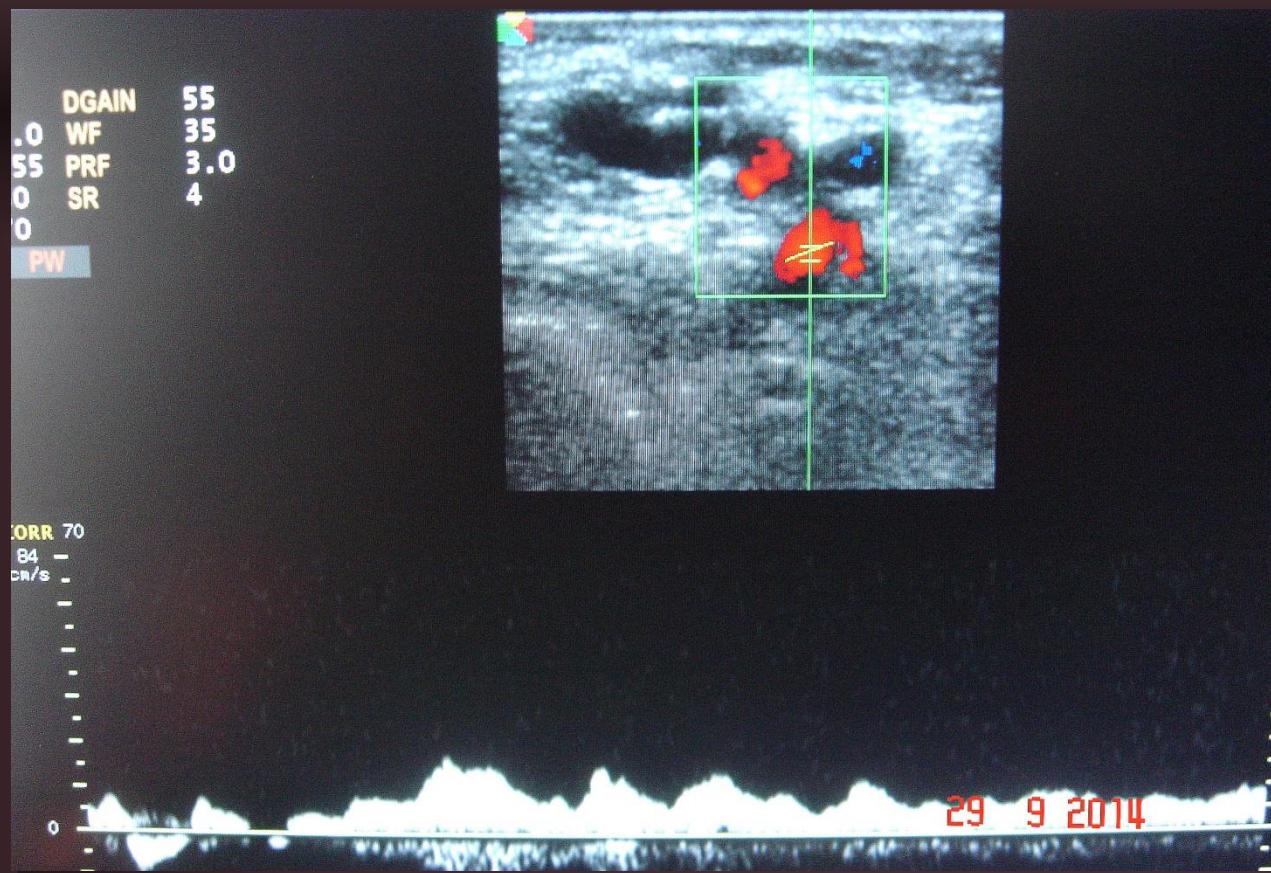


CAUSE DI RECIDIVA nell'esperienza personale



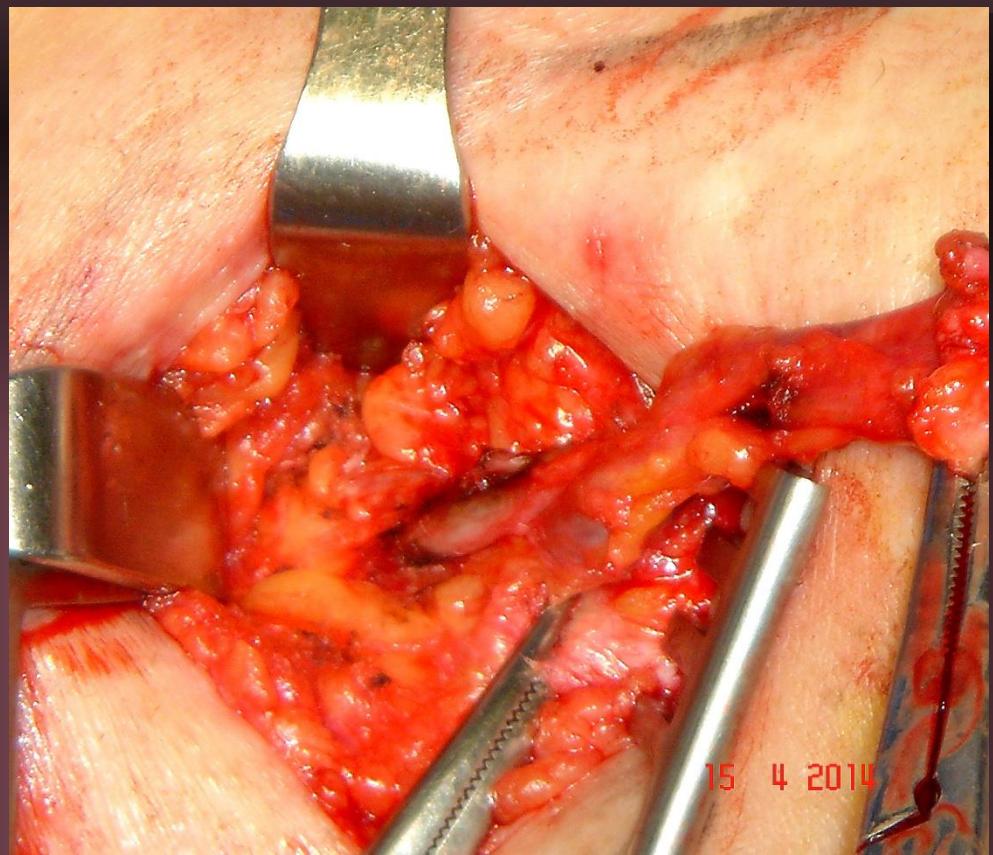
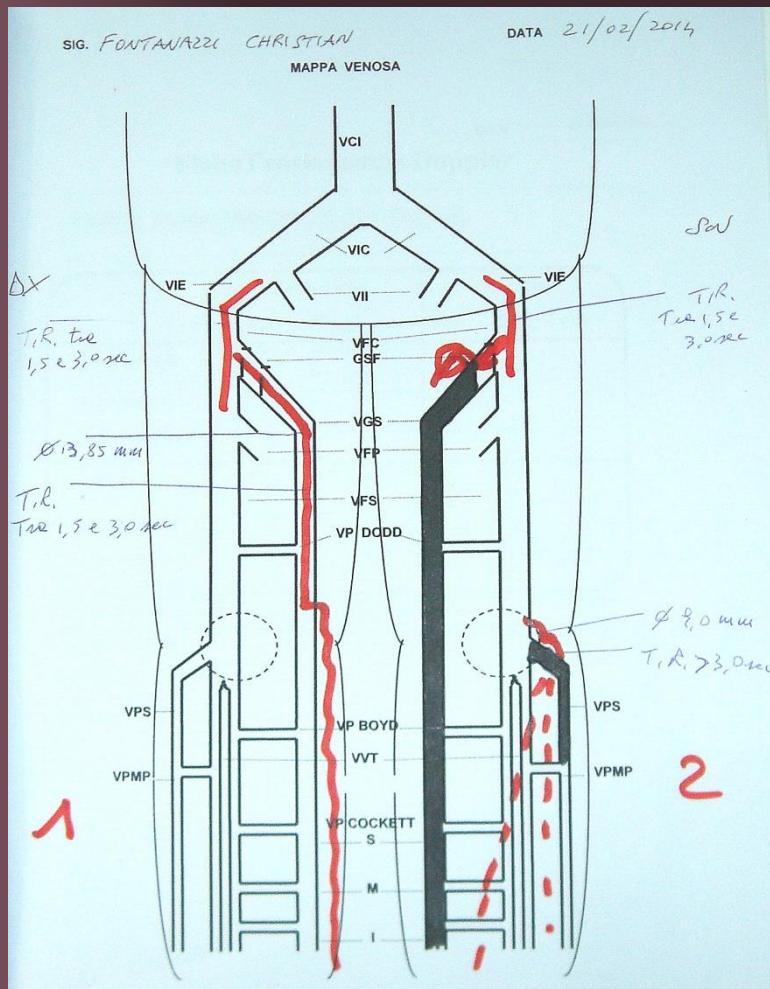
*V. Perforante Gemellare Interna
in Comunicante inter-Safenica*

CAUSE DI RECIDIVA nell'esperienza personale



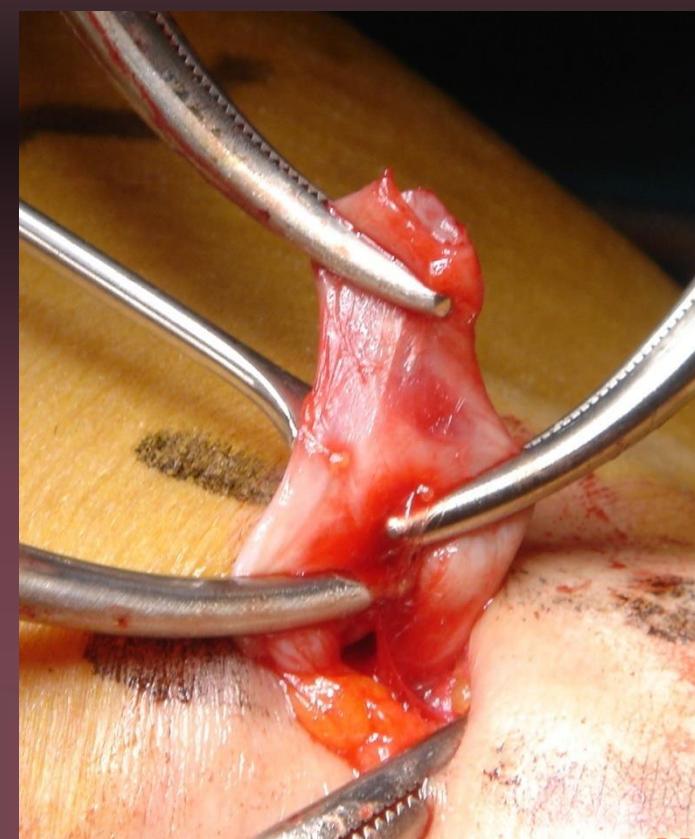
*V. Perforante Poplitea
non Safenica*

CAUSE DI RECIDIVA nell'esperienza personale



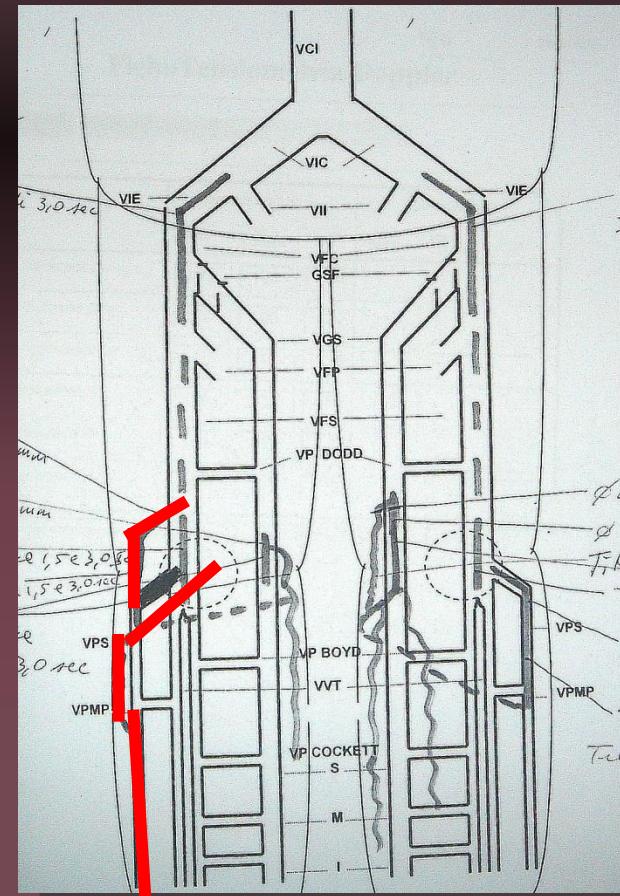
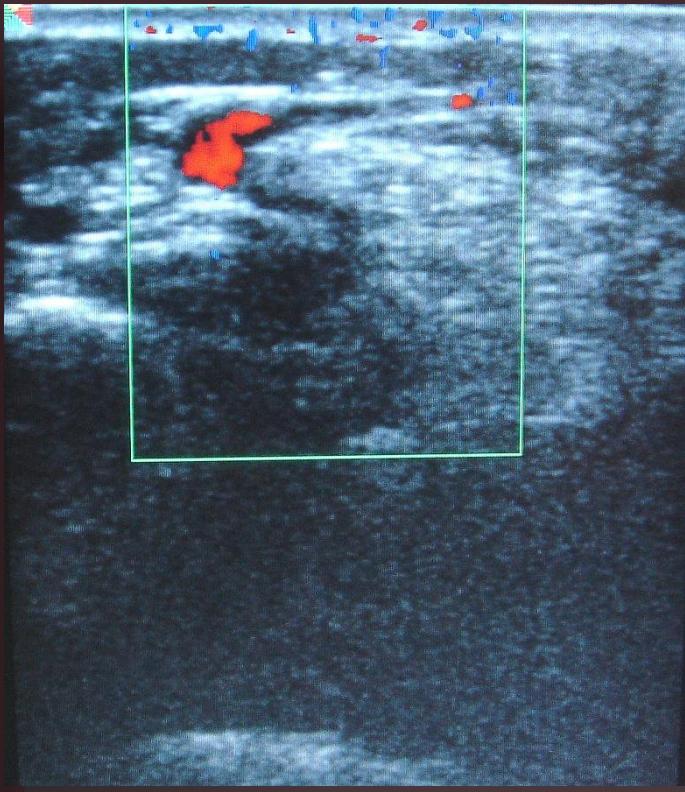
*V. Perforante Poplitea
non Safenica*

CAUSE DI RECIDIVA nell'esperienza personale



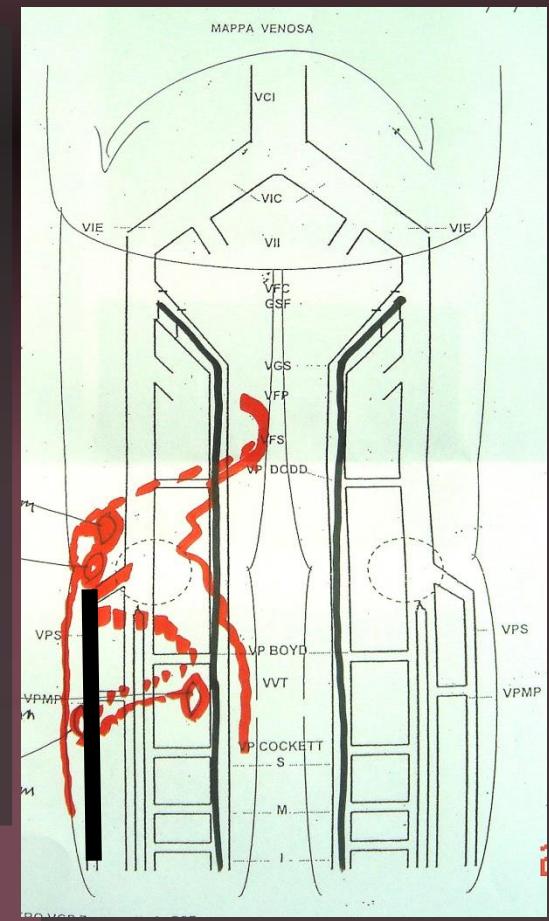
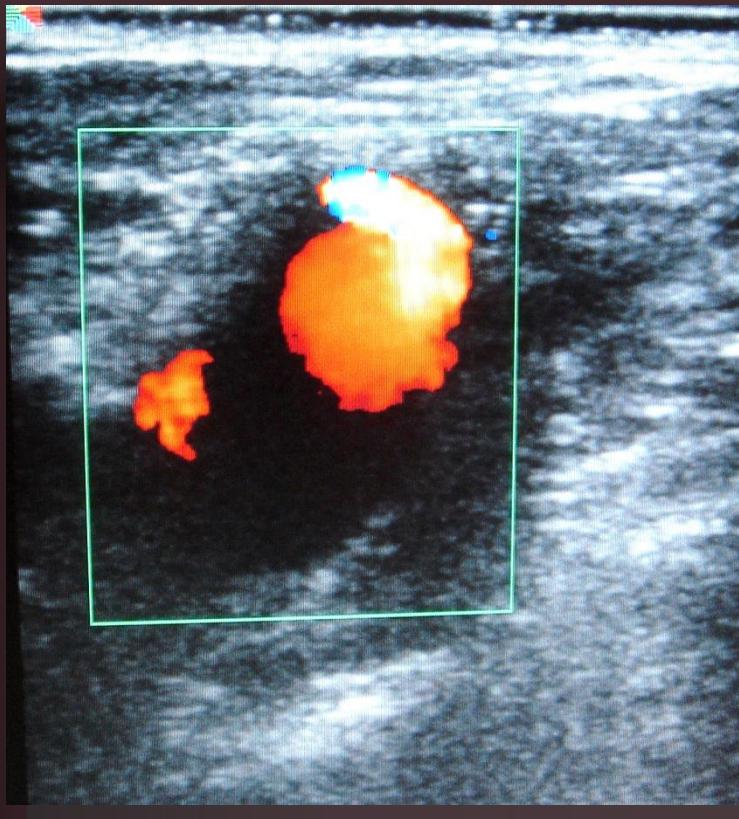
*V. Perforante laterale
Reflusso in VPS residua
Trombosi della V. Gemellare interna*

CAUSE DI RECIDIVA nell'esperienza personale



*Confluenza alta VPS
con moncone residuo
+ V. Perforante non Safenica*

CAUSE DI RECIDIVA nell'esperienza personale



*Moncone VPS residuo aneurismatico
+ V. Perforante non Safenica duplice
+ Vv. Perforanti Gemellare e Peroniera
+ V. Accessoria Mediale (Giacomini)*

CASISTICA PERSONALE (18 CASI)

ETA' min 27, max 73, med 38

PAZIENTI 16 ARTI 18 BILAT 2

M 7 (43%) F 9 (56%)

DX 7 (39%) SX 11 (61%) SINTOMI 15 (93%)

GSP 15 (89%) RSP (*non GSP*) 3 (16.6%)

Ulcera venosa cronica 1 = 5.5%

INTERVALLO Int./Rec. (/13 casi) min 1, max 12, med 4.8

RE-INTERVENTI (vv.>4mm) 13

SCLEROTERAPIA (vv.<4mm) 4

T. CONSERVATIVA 1

CASISTICA PERSONALE (18 CASI)

ELEMENTI ANATOMICI

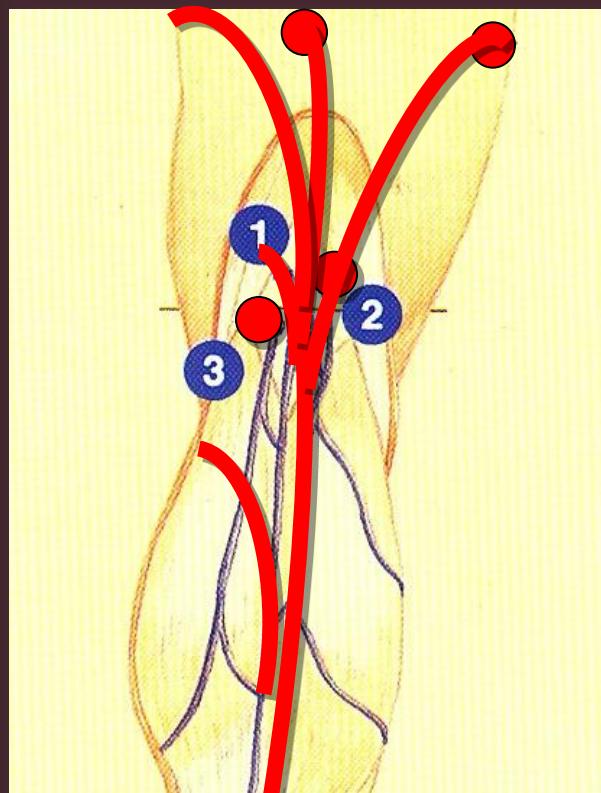
Moncone safenico 13 (72%)
(aneurismatico 1 – 5.5%)

V. Perforante Gemellare
Mediale 2 (11.1%)

Comunicante
Intersafenica
Mediale 3 (16.6%)

VPS duplice 2 (11.1%)

GSP



in varia combinazione

V. Perforante Poplitea 4 (22%)

V. Perforante Glutea
1 (5.5%)

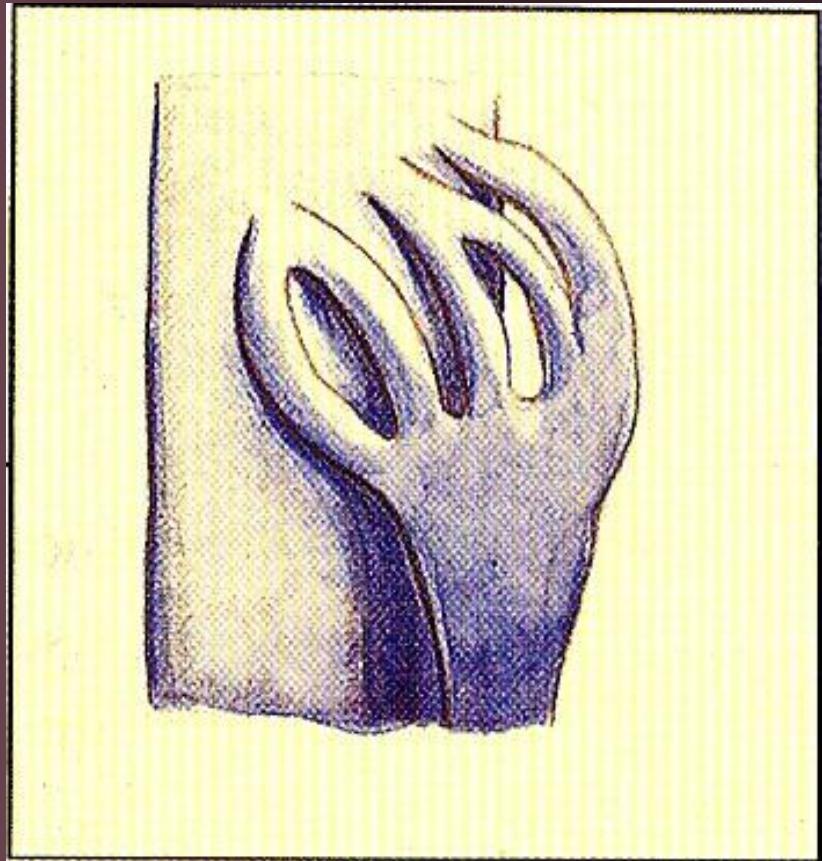
V. Accessoria Mediale
(Giacomini) 2 (11.1%)

V. Perforante Laterale
1 (5.5%)

RSP

CASISTICA PERSONALE (18 CASI)

Circolo Collaterale Complesso (“cavernoma”) 4 (22.2%),



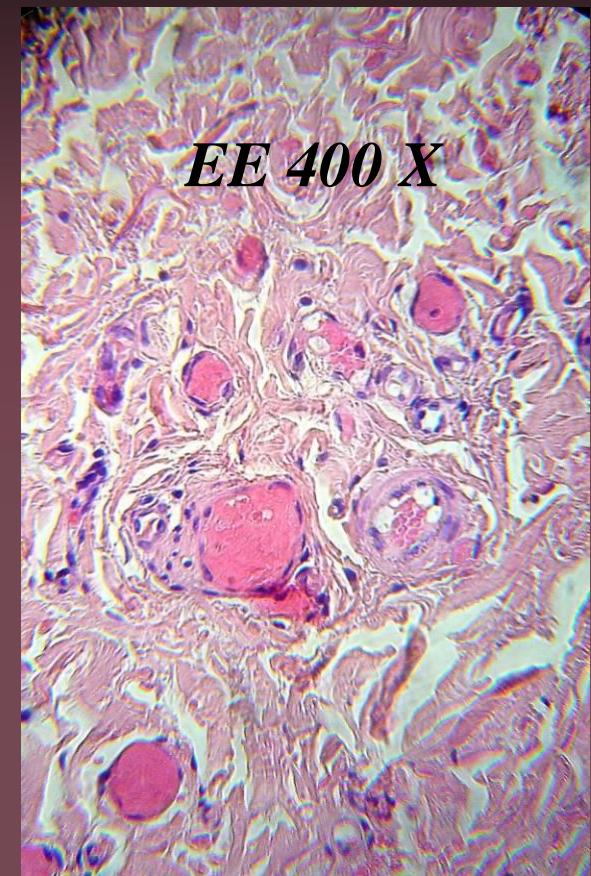
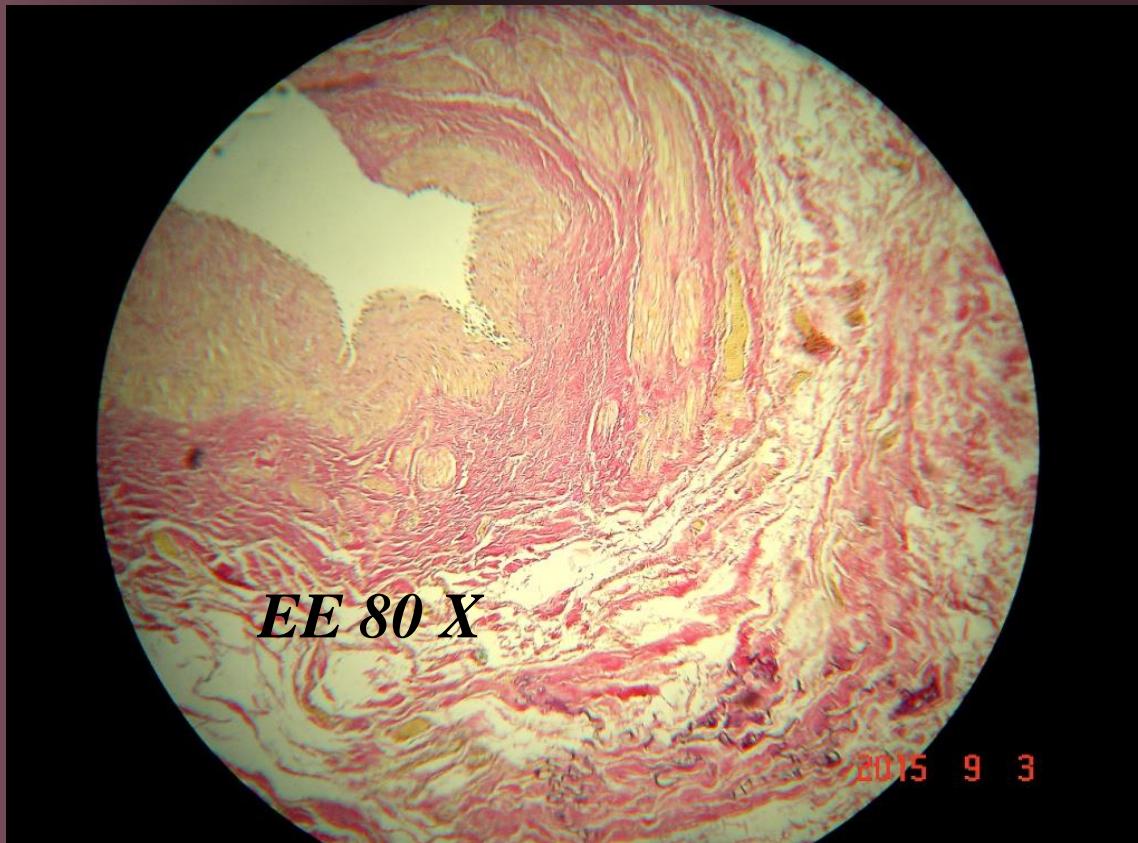
Aneurisma VPS 1

Insuff. Vv. profonde 0

Varici del N. Sciatico 0

CASISTICA PERSONALE (18 CASI)

“Neoangiogenesi” 0



CASISTICA PERSONALE (18 CASI)

Precedente Intervento	N	%
INTERRUZIONE SP +STRIPPING	7	38.8
LEGATURA BASSA	6	33.3
CHIVA	3	16.6
LASER EV	2	11.1

CASISTICA PERSONALE (18 CASI)

<u>Trattamento (13 CASI)</u>	<u>Diam.</u>	<u>N</u>	<u>%</u>
Interruzione Chirurgica + Scleroterapia	4-12	9	69%
Scleroterapia Complementare	< 6	6	46%
Interruzione SP + Stripping	> 12	1	7.6%
Sola Scleroterapia	< 6	1	7.6%
Terapia Conservativa		1	7.6%

LETTERATURA

CHIRURGIA

Rettori R. J Mal Vasc. 1998 Feb;23(1):54-60.

O'Donnell TF Jr1, Iafrati MD. Phlebology. 2007;22(4):148-55.

SCLEROTERAPIA

Lin JC¹, Iafrati MD, O'Donnell TF Jr et Al J Vasc Surg. 2004;39(5):10538.

Perrin M, Gillet JL. Phlebology 2008;23(2):64-8.

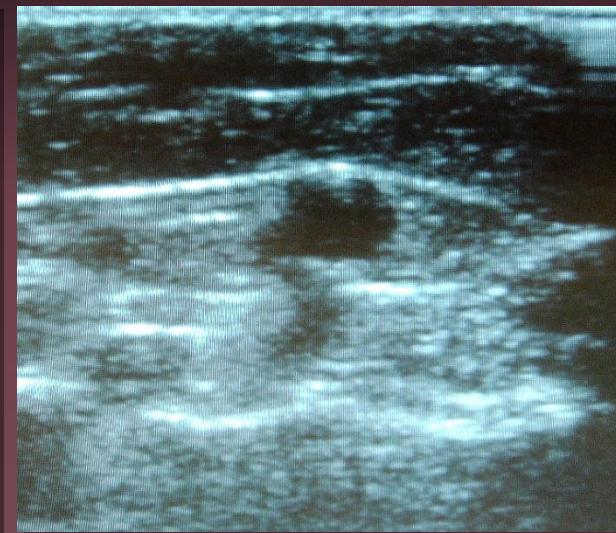
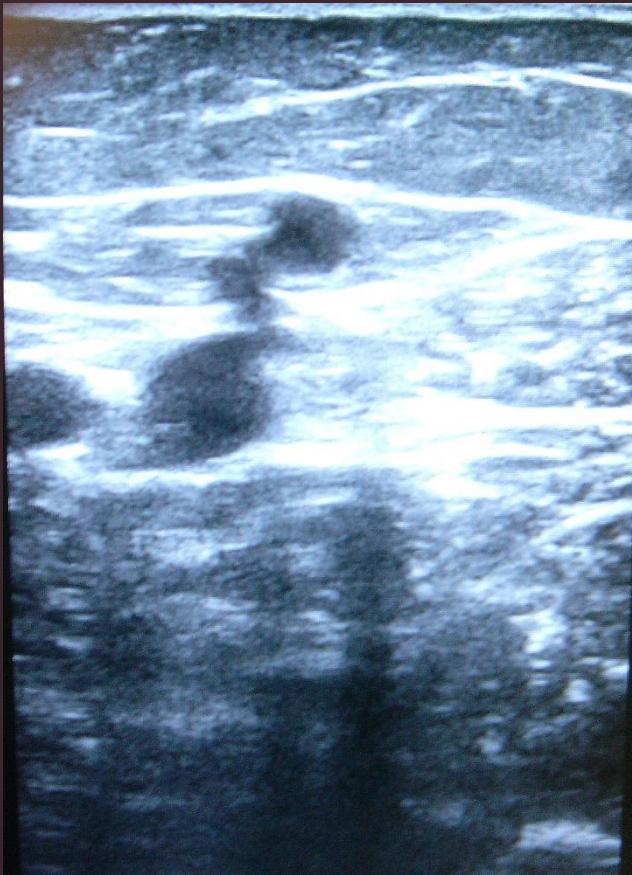
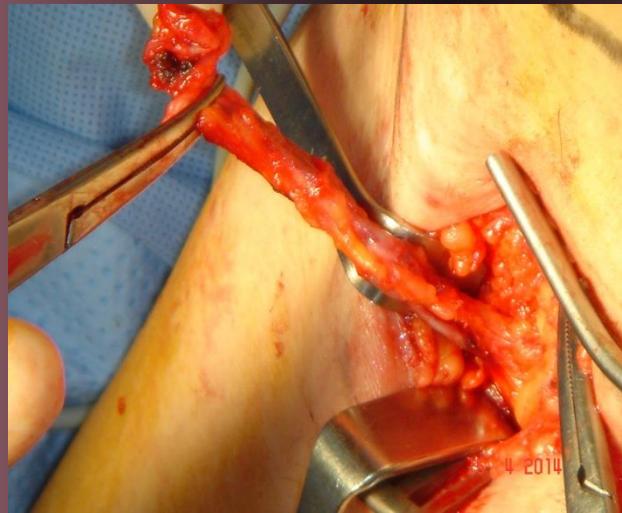
T. ENDOVASC.

Van der Velden S, Biemans AM, De Maeseneer M, BJS. July 2015;102(10)

Kerver AL, van der Ham AC, Theeuwes HP, et Al. J Vasc Surg. 2012 Jul;56(1):181-8.

CASISTICA PERSONALE (18 CASI)

Interruzione Chirurgica + Scleroterapia
intraoperatoria eco-guidata (69%)



VPS Residua con

V. Perforante
Gemellare
Mediale

CONCLUSIONI

**Le recidive della Regione (*Safeno-*)Poplitea
Come diagnosticarle e quale terapia EBM**

*Ricerca delle possibili combinazioni
e “varianti delle varianti”*

DIAGNOSI

Clinico-Sstrumentale - ECD 2° livello

(FleboRX, angioTC, angioRM se sospette IVP o MVC)

CONCLUSIONI

Le recidive della Regione (*Safeno-*)Poplitea Come diagnosticarle e quale terapia EBM

TRATTAMENTO

Revisione Chirurgica + Scleroterapia I.O. > 4 mm

Interruzione SP + Stripping >12

Sola Scleroterapia < 6

*Laser e.v. se controindicazioni a scleroterapia
Eventuale Scleroterapia Complementare*

IL MESSAGGIO



EVITARE le "TRAPPOLE"
Della REGIONE (Safeno-) POPLITEA