Are there any differences between CHIVA and ASVAL

Claude Franceschi

« Controverses et Actualités dans la maladie veineuse »

DEFINITIONS

CHIVA

CLAUDE FRANCESCHI

Prefaces Jean-Michel CORMER - Gluscope ZANNINI

THEORY AND PRACTICE
OF THE CONSERVATIVE
HAEMODYNAMIC CURE
OF INCOMPETENT AND VARICOSE
VEINS IN AMBULATORY PATIENTS

CONSERVATIVE
HAEMODYNAMIC CURE OF
INCOMPETENT AND
VARICOSE VEINS IN
AMBULATORY PATIENTS

Translation: John EVANS.

ÉDITIONS DE L'ARMANÇON

ASVAL

Selective
Ablation of
the Varices
under Local
Anesthesia

Common Feature

Both CHIVA and ASVAL are

Ambulatory, Local Anesthesia (CHIVA since 1988)

Spare the GSV trunk (CHIVA since 1988)

Without SFJ flush ligation (CHIVA since 1988)

In order to suppress the trunk reflux (CHIVA since 1988)

In selected indications (CHIVA since 1988)

Criterions for NO SF Flush Ligation

In Varicose Tributaries + GS trunk reflux

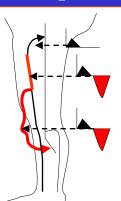
CHIVA Criterions

Limited to Shunt II and III

Proximal trunk re-entry perforator exclusion

Other escape points exclusion

Shunt II
SFJ is
Competent



Status specified
Shunt III
SFJ is
Incompetent



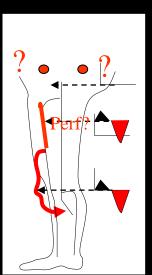
ASVAL Criterions

Shunts not identified

Proximal trunk re-entry perforator NOT checked

Other escape points NOT checked

Terminal valve Status not specified



Evidence Based Medecine Shunt II and III diagnosis and treatment specificities

Although ,CHIVA distinction from Shunt II to Shunt III and others permits an accurate prediction of reflux and varicose recurrence. ASVAL doesn't.

Evidence Based Medecine

Shunt II and III diagnosis and treatment specificities

AVOIDING SAPHENOFEMORAL JUNCTION DISCONNECTION IN VARICOSE VEIN SURGERY

P. ZAMBONI M.D., S. GIANESINI M.D., E. MENEGATTI R.V.T., G. TACCONI M.D., A. PALAZZO M.D., A. LIBONI M.D.

Britsh Journal of Surgery In Press

200 P with varicose veins + saphenous trunk reflux. Ligation and short proximal avulsion

3 years follow-up

Saphenous Trunk Reflux	SFJ Incomp. Shunt III 1st step N° 100	SFJ Comp. Shunt II N° 100	P	OR (95% CI)
SFJ reflux reappearance N° (%)	71 (71%)	3 (3%)	<.0001	79.2 (23.2-270.2)
Total GSV recurrences N° (%)	(82%)	14 14(%)	<.0001	31.5 (14.4-68.6)

Procedures and outcomes

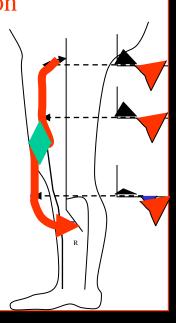
CHIVA

ASVAL

First step

Shunt II and Shunt III Proximal Incompetent tributaries disconnection

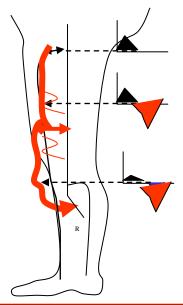
Varices shrink to normal NO Telangectasias NOR Spider veins



First step

Incompetent tributaries extensive phlebectomy (MULLER)

Varices Ablated : lead to Telangectasias Spider veins



Procedures and outcomes

CHIVA

ASVAL

Second step procedures: Delayed Secondary GSV Trunk reflux recurrence is due to Trunk re-entry perforator activation

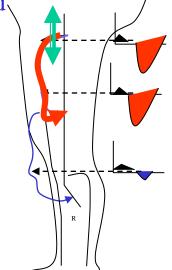
Shunt III (not Shunt II)

Ligation at SFJ

GSV trunk sparing

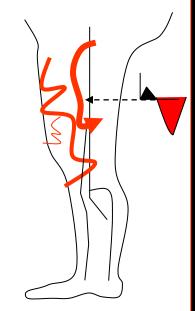
By-pass capital saved

NO Telangectasias NOR Spider veins



GSV trunk destruction (stripping and others)

By-pass capital destroyed



Common eligible varicose feature

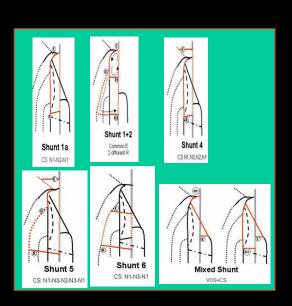
Shunts II and III 1step

Other eligible varicose features

CHIVA

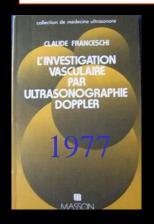
ASVAL/Muller

all the other varicose configurations

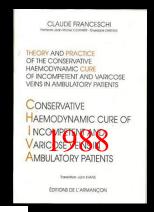


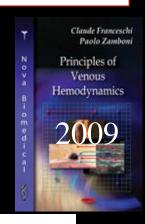
?

Different Professional Requirements









CHIVA

ASVAL

Venous
Hemodynamics
Expertise

Mandatory

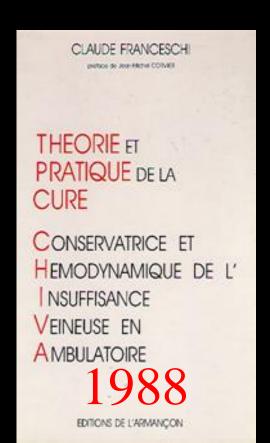
Useless

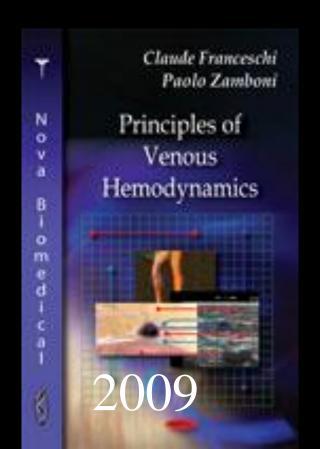
Venous Duplex Expertise

Mandatory

Useless

Evidence Based Medecine trials demonstrate CHIVA validity and superiority to glodstandards







1 Randomized Controled Trial CHIVA vs Compression(Gold Standard) Ulcer TreatmentCHIVA Better Than Compression

Minimally invasive surgical management of primary venous ulcers vs. compression treatment: a randomized clinical trial., Zamboni P, Cisno C, Marchetti F, Mazza P, Fogato L, Carandina S, De Palma M, Liboni A Eur J Vasc Endovasc Surg. 2003 Sep;26(3):337-82/

2 Randomized Controled Trials CHIVA vs STRIPPING(Gold Standard) Long Term Varicose Outcomes

CHIVA

Better Than Stripping A Grade lev.1b

STRIPPING vs. HAEMODYNAMIC CORRECTION (C.H.I.V.A.): A LONG TERM RANDOMISED TRIAL10 YEARS.

Carandina S, Mari C, De Palma M, Marcellino MG, Cisno C, A Liboni A,P. Zamboni Legnaro Varicose vein stripping vs haemodynamic correction (CHIVA): a long term randomised trial Eur J Vasc Endovasc Surg. 2008 Jul;36(1):118-9

Varicose Vein Surgery: Stripping vs the CHIVA method. A Randomized Controlled Trial A 5 years O.Pares and al: Annals of Surgery. In Press





Is Stripping "obsolete" gold standard? SO FAR, NO EVIDENCE

Stripping is still everyday worldwide performed.

New destructive techniques are today preferred not because they are more efficient, but less invasive.

SO FAR, NONE OF THEM PROVED MORE EFFICIENT THAN STRIPPING.

CHIVA DID IT

VENOUS DIGEST

VOLUME16, NUMBER12 • DECEMBER2009

Varicose vein stripping vs haemodynamic correction(CHIVA): a long randomised trial.

Carandina S, Mari C, De Palma M, Marcellino MG, Cisno C, Legnaro A, Liboni A, Zamboni P. Eur J Vasc Endovasc Surg. 2008 Feb;35(2):230-7.Epub 2007 Oct 26

ABSTRACT & COMMENTARY BY:PROF KEN MYERS, MS, FRACS, FACS Melbourne, Australia

"Latter-dayproponents of endovenous techniques may contend that the article is of historical interest comparing two obsolete surgical techniques. If so, they would do well to follow the authors' example with properly constructed randomized trials, followed up for the longterm".

ASVAL procedure = Muller

Docteur Jean-Jérôme GUEX wrote

[vasculab] from current state of the art, to (future ?) recommendations....a plea for a mutual respect 12/10/09 14:44

"It has been stated that <u>ASVAL</u> is nothing else than <u>Muller's</u> technique. This is technically <u>not untrue</u>,

but ASVAL theory helps understanding how extensive phlebectomy works and has somehow helped to put some order in previously scattered practices".

what's that new theory?

ASVAL Theory ???"That is the explanation of the «

aspirating effect » of the varicose reservoir on the saphenous vein" (Dr Pittaluga : Vasculab 2009)

In contradiction with physics laws!!

...This dilatation leads to the decoaptation of the saphenous valves, inaugurating the vicious circle between the parietal disease and the valvular insufficiency". (Dr Pittaluga : Vasculab 2009)

In contradiction with daily Duplex findings and

Prospective epidemiological study on the beginning of varicose veins*. Schultz-Ehrenburg and al. Phlebologie 2009; 38: 17–25

Longitudinal study . 740 pupils 10-12 to 18-20. "The manifestation of a truncal VV is preceded by a VR in the same vein (p = 0.039). "

Is ASVAL reflux elimination a novelty?

GSV reflux elimination

1 ASVAL evidence since 2009

Pittaluga P, Chastagnet S, Rea B, Barbe R.

Midterm results of the surgical treatment of varices by phlebectomy with conservation of a refluxing saphenous vein.

JVS, July 2009; 50(1):107-118

4 CHIVA evidences since 1991

Ballly M.

CHIVA 2 EMC 1991-2

Zamboni P, Marcellino MG, Cappelli M, Feo CV, Bresadola V, Vasquez G, Liboni A.

Saphenous vein sparing surgery: principles, techniques and results.

J Cardiovasc Surg (Torino). **1999** Oct;40(5):767.

Zamboni P et al.

Reflux Elimination Without any Ablation or Disconnection of the Saphenous Vein. A Haemodynamic Model for Venous Surgery

Eur J Vasc Endovasc Surg **2001**;21:361-369

Escribano JM, Juan J, Bofill R, Maeso J, Rodriguez-Mori A, Matas A.

Durability of Reflux-elimination by a Minimal Invasive CHIVA Procedure on Patients with Varicose Veins. A 3-year Prospective Case Study.

Eur J Vasc Endovasc Surg 2003;25(2):159-163

Why is ASVAL claimed INNOVATIVE?

(http://www.riviera-vein.com/frameident.html).

AVAL is NO MORE THAN:

Robert Muller method born 50 years ago: Ambulatory, Extensive phlebectomy;

that obtains a saphenous reflux suppression when the hemodynamic configuration matches with Shunts II and III according to a phenomenon described 20 years ago by CHIVA

As far as any technique doesn't prevail CHIVA, overlooking this few invasive method that reduces recurrences and preserves the venous capital is a scientific and professional mistake

.....Particularly when by-pass needs increase with the aging population