DIABETES and

GSV saving for eventual need for bypass

INFORMED CONSENT about VARICOSE VEINS TREATMENTS   
The Great Saphenous Vein (GSV), in normal and varicose people can be harvested to treat a life-threatening coronary or lower limbs arterial disease. Indeed, GSV in varicose patients are eligible even if refluxing which is confirmed by the use of GSV stripped in varicose patients cold stored and sold as allograft for arterial by-passes in other patients, even if not as good as autologous.

The Great Saphenous Vein (GSV) in healthy subjects, but also in varicose veins (the saphenous veins removed from a patient to treat varicose veins are frozen by a Lyon-based company (Bioprotec) and then resold to carry out bypasses in other patients) can be removed for coronary or A,B limb bypass surgery.

In France

https://bioprotec.fr/

Stripped then frozen great saphenous veins of variable calibre between 3.5 and 10 mm: 20 cm. 1500 Euros

Year 2020-2021: 12,846 stripped and frozen saphenous veins, including 3,444 patients treated. There were thus in France in 1 year 3444 patients who did not have or did not have any more saphenous Vein

Knowing that these homografts give less good results than autografts (see the various studies in the literature)

Paradoxically, most of the time, no information is given to the patient about the benignity of the varicose disease, the possible future vital necessity of his GSV as arterial by-pass, the possible conservative and efficient treatment with elastic stockings or GSV conservative surgery. Only destructive treatments are proposed : Great Saphenous Vein (GSV) surgical (Stripping) or endovenous GSV destruction ( sclerosis, foam, Laser, Radio-frequency, Glue, Steam ) . This is contrary to the informed consent law , particularly regarding the possible vital future need of the GSV for arterial by-pass. In addition, exhaustive conservative treatments from abstention, to stockings and conservative surgery should be proposed.

A- Aorto-Coronay saphenous by-pas comparable to left internal thoracic artery (LITA) . 2 studies show that No touch technique of saphenous vein harvesting provides significantly higher patency than the conventional technique and that was still comparable to that of the LITA.  
1-No touch technique of saphenous vein harvesting: Is great graft patency rate provided?   
Papakonstantinou NA1, Baikoussis NG2, Goudevenos J3, Papadopoulos G4, Apostolakis E5J Thorac Cardiovasc Surg. 2015 Oct;150(4):880-8. doi: 10.1016/j.jtcvs.2015.07.027. Epub 2015 Jul 15.   
2-The no-touch saphenous vein for coronary artery bypass grafting maintains a patency, after 16 years, comparable to the left internal thoracic artery: A randomized trial.Samano N1, Geijer H2, Liden M2, Fremes S3, Bodin L4, Souza D5. TRIAL REGISTRATION:[ClinicalTrials.gov](https://l.facebook.com/l.php?u=https%3A%2F%2FClinicalTrials.gov%2F&h=ATOFMb-gVkCWH4VU-LfGfyBtgxSiRrN4g2DbutPXv9i3JVGcydSnArfosstQxvMAgSrA5RVz1GIoaBd6P6piYLecxgiDXA5byQ7MnmKwLBRKzohVKQZS9wV5Ye6JKVKWUZODXK_n3bNP0Mhv32eww2LGS6_KDp0LeABf9HRZVjI11PIEhAqZhLKh7CKdnDobOGEgu8t5aq6IzAeOo9rZ1dTuwqI2cfTfRG3-2gc6CA)NCT01686100.Copyright © 2015 The American Association for Thoracic Surgery. Published by Elsevier Inc. All rights reserved.

B-Infra-popliteal Saphenous by-pass is still the best method. 2 Meta-analysis show that infra-popliteal venous by-pass remains the best method.  
1-Meta-analysis of infrapopliteal angioplasty for chronic critical limb ischemia  
Marcello Romiti, MD,a Maximiano Albers, MD,a Francisco Cardoso Brochado-Neto, MD,a  
Anai Espinelli S. Durazzo, MD,b Carlos Alberto Bragança Pereira, PhD,c and Nelson De Luccia, MD,b ( J Vasc Surg 2008;47:975-81.)  
2-Meta-analysis of popliteal-to-distal vein bypass grafts for critical ischemia  
Maximiano Albers, MD, PhD,a Marcello Romiti, MD, PhD,a Francisco Cardoso Brochado-Neto, MD, PhD,a  
Nelson De Luccia, MD, PhD,a and Carlos Alberto Bragança Pereira, PhD,b Santos and São Paulo,  
São Paulo, Brazil ( J Vasc Surg 2006;43:498-503.)  
C- The level of performance of cold-stored venous allograft is inferior to autologous vein sources.   
Outcomes of cold-stored venous allograft for below-knee bypasses in patients with critical limb ischemia. Ziza V1, Canaud L2, Gandet T3, Molinari N4, Alonso W3, Chastan R3, Branchereau P3, Picard E3. J Vasc Surg. 2015 Oct;62(4):974-83. doi: 10.1016/j.jvs.2015.04.437. Epub 2015 Jul 2.  
D- The CHIVA vs Stripping and EndoVeinous Ablation reduces recurrence of varicose veins and produces fewer side effects than vein stripping.  
1-CHIVA method for the treatment of chronic venous insufficiency.Bellmunt-Montoya S1, Escribano JM, Dilme J, Martinez-Zapata MJ. Cochrane Database Syst Rev. 2015 Jun 29;(6):CD009648. doi: 10.1002/14651858.CD009648.pub3.” The CHIVA method reduces recurrence of varicose veins and produces fewer side effects than vein stripping”  
2-Hemodynamic classification and CHIVA treatment of varicose veins in lower extremities (VVLE)  
Hua Wang1, Qianyi Chen1, Zhewei Fei1, Endong Zheng2, Zhanghui Yang2, Xiaowang Huang2. 1Department of Vascular Surgery, Xinhua Hospital Affiliated to Shanghai Jiaotong University School of Medicine Chongming Branch, Chongming 202150, China; 2Department of General Surgery, Cangnan People’s Hospital, Wenzhou 325800, Zhejiang. Int J Clin Exp Med 2016;9(2):2465-2471 [www.ijcem.com](https://l.facebook.com/l.php?u=http%3A%2F%2Fwww.ijcem.com%2F&h=ATNJ1IO9M-I6qRirFJhq6468tEjdilPgBfFsjLXRd5hFyY0gyiMFle3OebmkoIUR6PyfudH06kwKerxg9YNPR47Lt3ePEL_mfALgjPErtiGuGxjnrvnBtGodr1GNOay06h7TX4cR_UQXqa2MXuLzohC-PKvwv4XFSeWS90E4AJ1QsC5YmVBIYL-dJXMqqgzDJE6eN-9uNyj1CT7tvlR0KYF3cF7UY9GgOgY) /ISSN:1940-5901/IJCEM0016552 “Conclusion: CHIVA treatment has significant better curative effect than traditional surgery and endovenous therapy in the treatment of varicose veins. CHIVA treatment induced less damage, quicker health recovery, high safety factor and lower complications. Thus, CHIVA treatment can be widely used in clinical restoration than general minimally invasive operations”.

E- Cytokines/chemokines levels are significantly reduced in the CHIVA treated patients as compared to the CVI patients before surgery  
Modulation of Circulating Cytokine-Chemokine Profile in Patients Affected by Chronic Venous Insufficiency Undergoing  
Surgical Hemodynamic Correction.Veronica Tisato,1 Giorgio Zauli,2 Sergio Gianesini,1,3 EricaMenegatti,1,3 Laura Brunelli,1  
RobertoManfredini,4 Paolo Zamboni,1,3 and Paola Secchiero1 Journal of Immunology Research Volume 2014, Article ID 473765, 10 pages [http://dx.doi.org/10.1155/2014/473765](https://l.facebook.com/l.php?u=http%3A%2F%2Fdx.doi.org%2F10.1155%2F2014%2F473765&h=ATNDxhJHug7QXILcIN4dvpE85ihVGF9LUsy0xDfDLmbqy45druoD-6b7AFDyjOjK7du1hOtA_OPMQls6tA1rrtWsHhBBeWEvMGkKtEskCEn1vgn_1YKvb369aUMaudhEiEAT8j_l0y3bufOcaK8bIic305ONRiraOoK_RRGSOM0gfiqESj6Ml_pIh4Ug7MgU-UHSHYGKvozhU78Hatb3DgbyV4gRH0cpSmw)

F- EBM and Conflicts of interest are questioned:

The Endovenous Literature: A Perfect Storm of Limited Effectiveness Data, Rapid Technological Evolution and Potential Conflict of Interest David C. Bosanquet, Christopher P. Twine Eur J Vasc Endovasc Surg (2017) 54 , 771 .  
DOI: [http://dx.doi.org/10.1016/j.ejvs.2017.09.009](https://l.facebook.com/l.php?u=http%3A%2F%2Fdx.doi.org%2F10.1016%2Fj.ejvs.2017.09.009&h=ATMLz9-szeNRMAfeiebaDt9SyJ9WalpITX3tntHd4lU7p0YFi88RjPSe4L9o_ygxD1nbCAs1fBHJb8DYxQQKduLbYEFAGU2_Uj-5TJ-ZAksaO2ypbpLwcgi6LYSfd9g320nYywE6T-JG9IEoF4uX7gnDdGqsRRWqI_TrD-zKabvN6dtsE-YQP7rW8Ga7pKBIXeSNjrJKcKSvdlvAl_U2I15_9BJV38UuIT8)  
« The literature supporting the endovenous revolution has left clinicians and commissioning bodies in a difficult position. There are many dubiously-powered randomised studies comparing heterogeneous endpoints of limited clinical value, for a condition where the predominant aim of treatment, improvement in quality of life (QoL), has been overlooked for too long. There is a wide selection of treatment options of varying costs which are constantly being updated. Lastly, a potential conflict of interest can occur because endovenous treatment can be lucrative for both device companies and the clinician”.

G- Mini-invasive venous treatments doesn’t mean safe.  
Morbidity and mortality after thermal venous ablations.  
Malgor RD1, Gasparis AP, Labropoulos N. Int Angiol. 2016 Feb;35(1):57-61. Epub 2015 Feb 12  
“EVA has gained high acceptance worldwide but the risks tend to be overlooked. Despite a very low complication rate, mortality has been reported. The complications found in MAUDE represent only a fraction as the majority of the practitioners are not aware of this database. Further investigation by a large national registry is warranted to better define the real magnitude of EVA complications”