

ISSN (electrónico): 1695-2987 - ISSN (papel): 0003-3170





## How I do it

### **CHIVA Strategy**

**Special Article** 

CHIVA strategy

Jose Maria Escribano Ferrer

Servicio de Angiología, Cirugía Vascular y Endovascular. Hospital Universitari Vall d'Hebron. Barcelona

#### Summary

Keywords: CHIVA. Brand. Strategy. There are various manuals on the CHIVA procedure for ambulatory treatment of venous insufficiency, in this article, the author does not analyze in depth the hemodinámicos funds of the different types of venous shunts, it is important to know to apply the best technique in this case In this case, it focuses on important technical details that can be fundamental for its practical clinical use.

#### Abstract

Keywords: CHIVA. Marking. Strategy. Although there are several manuals on the CHIVA procedure for the outpatient treatment of venous insufficiency, in this article the author does not analyze the hemodynamic basis of the different types of veno-venous shunts, which are important to know in order to apply the best strategy in each case, but instead focuses on important technical details that may be critical to its practical clinical utility.

Received: 01/20/2023 • Accepted: 01/20/2023

Conflict of interests: the author declares that there are no conflicts of interest.

Artificial Intelligence: The author declares that we do not use artificial intelligence (IA) nor do we use AI for the writing of the article.

Escribano Ferrer JM. Estrategia CHIVA. Angiolía 2024;76(4):241-245

DOI: http://dx.doi.org/10.20960/angiologia.00497

#### Correspondence: José María

Escribano Ferrer. Servicio de Angiología, Cirugía Vascular y Endovascular. Hospital Universitari Vall d'Hebron. Pg. of the Vall d'Hebron, 119. Horta-Guinardo. 08035 Barcelona e-mail: josemariaescribano.jme@gmail.com

©Copyright 2024 SEACV and ©Arán Ediciones SL This is an Open Access article under the CC BY-NC-SA license (http://creativecommons.org/licenses/by-nc-sa/4.0/).

242 JM Escribano Ferrer

#### **INTRODUCTION**

There are various manuals that explain the procedure, preparation and instructions in detail . One of the last words, written by Dr. Jorge Juan Samso (1), was sponsored by the SEACV and distributed free of charge during the National Congress of New Specialties in Sitges (Barcelona) in 2021. Subsequently, by Dr. Felipe Faccini (2) and the propio Dr.

Claude Franceschi (3) has published new manuals . El de Franceschi can be downloaded for free from its Facebook page.

This document is not the object of this document, however, we do not need to review the different strategies or venomous shunt types, but it is important to know how to apply the best strategy in each case. A mismo type of venovenous shunt can be treated with different strategies, which can hold up to the degree of clinical improvement and the possibility of future recurrence. This short article focuses on some technical details with fundamentally practical purposes.

#### MARKETING

First of all, the patient must rotate the extremity that is to be operated (CHIVA mark). During this period, the propio cirujano or a collaborator dedicated to ultrasonography, as in my case, determines the hemodinámica strategy that will be taken to the port. It is necessary to rotate with extreme precision and make a paper drawing with the appropriate explanations . This drawing, definitely archived, will serve in future examinations as a reference and will allow you to hear better so that the actual estimate is realized and compromised if the indication can be taken during the surgical procedure. The rotation of the mark must be precise, at the end of which the surgical incisions are the most "economical" possible. in our new object consists of devalvular a segment of competent safena distal to the emergence of the insuficient tributaria. In this way, we obtain a mixed drainage of the safena by the perforator until hemos devalvulado and the insufficient tributaria. We transform a venoso shunt of type 3 into a venoso shunt of type 1 + 2. We can interrupt the varicose tributaria without concern for the drainage of the safena. La devalvulación, as a general norm, does not have to be "hasta donde se pueda". In the practical case, it is better that there is a short safety segment, it has a "visible" perforator in the ecological exploration, and so the safety segment has devalvular tenga a minimum diameter of 2-2.5 mm, which allows introduce into the light the instrument with which it devalvularates without the lesion, usually the mismo ganchillo with which we subsequently realize the phlebectomía.

The fragmentation of the distal safena has a perforator, a frequent practice at the beginning of the Chiva, which has already been indicated on many occasions. It is frequent that it is recanalized and, moreover, a fragmented security limits much the possibility of future reactions in case of precision.

As for complementary phlebectomías (which are not part of the CHIVA strategy, but which are practiced with a fine aesthetic that is similar to any other type of varicectomy ), we must consider, as a general norm, that menos, es more. More extensive than phlebectomy , more telangiectasias futuras. To calculate the minimum segment necessary to flebectomizar, we will take into account the handling of Perthes. It should be noted that the normalization of venous pressures, as a result of the interruption of the venous shunt , will cause a reduction in the caliber of the safety valve (5) as well as varicose veins. In a space of 3 to 6 months there is a definitive clinical result and part of the visible varicose veins disappears without the need for flebectomizadas.

As a general rule, a hemodinámica strategy, it is decided that the internal safety is maintained and functions very well (4). Therefore, one has to control the point of flight, but it has to be engineered to provide good drainage to the safety net. This can result completely with the shunt valve of type 3, which is the most common. One of the gestures that we carwiilebe no contraindication for surgical treatment. In case of duda, po

#### CHIVA Strategy

we can reproduce the mismo and it will cause a lazo (smarch) and come if the varicose veins are vacated while walking (see Perthes). If the varicose veins become vacant, you will need to decide that the system is deeply venous, even if it is insufficient, maintaining its functionality. In case of no observed reflux during the muscular diastole with the manipulation of pump, we are affected by a superficial venoso compensatory system, so that it is contraindicated in the treatment of varicose veins. The indication of varicectomía insufficiency venosa deep primary or posflebítica is evaluated with the mismas maniobras. Obviously, in the posflebítica we must have a minute study of the procoagulant factors, because a new deep venous thrombosis (TVP) has altered a fundamental vicarious system, as it is the internal safety, can result particularly seriously. When varicectomies are eliminated, there is no possible solution. In the CHIVA, deberíamos, in all cases, try to preserve the safeno-femoral union if possible.

Finally, it is precisely because the lipotimias of bipedestación inmóvil extended in young people during the period are not rare. Particularly, at the beginning of our new clinical practice when we can extend a little time to exploration, we must be aware of this possibility because we can easily "desplomar" without mediating speech.

#### STRATEGY

Está claro que la strategy drenada es la strategy CHIVA propiamente. However, in Spain it is frequently practiced in CHIVA 1 + 2. The problem is that we hope to reduce the initial thrombosis of 40% of the safena and, although all of them will be recanalized, reducing the risk of 50% by to drain through insufficient collateral veins, starting from visible ones. To resolve the drain in the CHIVA 1 + 2 (no drain) we must repeat frequently the devalvulación of a competent safety segment, transforming it into an insufficient one before a perforator.

The possible future use of the safena for a bypass is not compromised, although the recanalization will be integral and can expect a reduction in media of 3 mm in the diameter of the safena which is insufficient if the safeno-femoral union is interrupted. Therefore , the competent segment of the safe vehicle If it is not true, thrombosis may still occur in the insufficient segment.

In the case of safes with a diameter greater than 10 mm, the initial strategy will be limited to interrupting the point of flight, usually the safe-fee- moral union. Pasados 6 meses, revaluaremos al paciente para practicar las flebectomías complementaryarias si se consideran necesarias.

The interruption of the point of flight is the fundamental step of any type of varicectomía, it is the union safeno-femoral or a perforating safeniana or extrasafeniana or a point of flight of pelvico origin.

If you cannot correct it correctly, because on occasions with serious origins, you have to inform the patient of a significant recidivism incident .

#### **TECHNICIAN CHURCH**

The technique, if possible, must be practiced in the same way as the label so that it is written on the skin that is in good condition, not alone on its representation in paper. The surgical procedure is carried out with local anesthesia and usually with sedation.

The patient will heal in the surgical area and with the elastic media. Please note that you travel frequently and your heparin dose will be indicated for one week.

The intervention must be practical considering some of the details as follows: strategic interruptions must be practical without exception; repito, sin muñón. They have local venous hypertensive zones that promote angiogenesis; Its the majority cause of repeat offenses.

Well, to remove a safe deposit without the need to allow you to view the safe. Therefore, in strategic incisions we must not take precedence over the aesthetics of the mini-incision as well as the accuracy of the interruption made. In addition, the level stone of the safe vena must be used with nonreabsorbable suture.

The section of the safeno-femoral union constitutes a point of discussion within the CHIVA group. The Italian group supports, and has published, that crosotomía is superior to crosectomía (7). In general, in Spain , the majority of cirujanos that practice CHIVA carry out crosectomía. Finally, groups of people and people who use it most frequently in practice 244 JM Escribano Ferrer

la crosotomía con radiofrequency. However, on the contrary, the bibliography supports the cross- tomy, although it does not seem to be more laborious and, in some cases, makes the ultrasonographic interpretation of the result difficult. Theoretically, the crosotomía, while preserving the colateral sides of the boat, reduces the percentage of recidivas, particularly if some of them are linked to a secondary flight point of the pelvico origin. Furthermore, it allows you to keep the internal safety in its entirety and allows a certain degree of "vaiven" in the safe flow which helps to keep its permeability in badly damaged cases.

Curiosity, the crosotomía with radiofrequency (8) also preserves the colaterals of the cayado, but does not harm the safeno-femoral union. The possible evolution of a colateral linkage at the point of flight of natural origin is not studied. The disadvantage of this strategic variant is that, with frequency, there is a safe segment of the vehicle of greater length than desired.

#### ADDITIONAL QUESTIONS FROM LOS EDITORES

¿The insufficiency of the internal extrafascial safety or R4 longitudinal with internal safety attrófica or hipoplasica modifies the strategy?

The guide contains several aspects to consider . Firstly, the extrafascial internal safety is not internally safe. In the second place, there is no mis- mo hipoplasica que atrófica. If with the muscular pump controls we obtain an anterior flow in the muscular system, we do not need to modify the strategy . In case of not obtaining flow with the pump handles or the safety of the sea, we can try to use the R4 longitudinal as if it is safe, keep in mind that it is more fragile in its handling and that it is more superficial than possible Thrombosis of the mismo is very symptomatic, so that it ensures good drainage.

¿How to reconceive the practice if a perforator of the pierna is insufficient?: ¿por su tamaño, con maniobras como la flexión dorsal del pie, Paraná o compresión manual distal? First of all, it must be noted that the perforator in the pier will be the perforator of the venous shunt initiated by the mucus, and that its tamaño will be in relation to the desarrollo of the venous shunt. Just like the safety switch, the interruption of the venomous shunt will result in a reduction

of the caliber of varicose veins and perforators of dre-naje. In the case where the venous shunt is initiated by the pierna by a perforator, it is associated with a deep venous insufficiency. The perforator can explore so much with the bomb's handles, we observe the flow of salt in the sistole and the muscular diastole, as with the handle of Valsalva, we observe the flow of salt during the misma. Is more sencillo of what parece. It is impossible to keep clear the color coding. Let's observe the misty color during the sístole and the diastole in the hands of the bomb. You should not explore with the manual compression controls. However, if we present the premise that the varicose veins with the point of fuga in the muscle have perforating entry into the stone and that the varicose veins aisladas in the stone have the point of fuga in the stone, we confirm the great majority of the veins .

Frequently, the insufficiency of the external safety has an origin close to the populous hue. What special precaution should you take to keep the muñón long? ¿Heparina profiláctica lasting more days?

We must consider, as in all cases, that the long message is the origin of repeat offenses. Lo mis -mo sucede con las perforantes del Hunter ou con los points de fuga de origen pélvico. Habría dos posibles strategies in this case. Una vez cerrado y antes de soltar la vena, inyectar esclerosante en el muñón proximal. The other possible solution is not to prevent and only practice insufficient collateral interruptions requiring the safety device to maintain the flow beforehand. Series similar to practicing a CHIVA 2 with internal safety. If the varicose veins are important, or the venous shunt is too loose, the chance of recurrence is expected in this second case will be high.

The esclerosis of the muñón with the interrupted vena (which also advises the practice of the perforators of the Hunter) is a good solution and the heparin

#### Machine Translated by Google

#### CHIVA Strategy

it is not necessary more than in other cases. The blade on the bottom of the bag works correctly and is washed by the alcanzar of the deep veneered system.

### If there is a history of DVT, is the rastreo to check the permeability of the deep venous system limited to the femoral and the population of the eco Doppler standard? Can you practice the standard CHIVA strategy?

Ya he commented that the manipulations were carried out in a previous párrafo. Therefore, if the exploration is limited to a particular sector, definitively, no. Another thing is how to usually carry out the venous exploration and particularly the deep venous system or even if a proximal obstruction can condition the treatment on the stone. Depends on the case. In a clinician patient mainly due to the obstructed eyelid, the treatment must be centered first in different sectors.

# ¿Qué ventaja ves en la práctica de radiofrecuencia para la tratamiento del coyado? ¿Y in the cianocrilato?

No fundamental warning. In practice , there is a segment of safety and the evolution of the possible insufficient collaterals of the roadway is dangerous. Ahorramos la inguinal incision, si. Also requires the use of material, which has a significant cost . In all cases, I think you have to personalize it in every case. In a patient with sobrepeso franco, aunque lo primero que le vamos aconsejar sea que adelgace, si si tene clinica grave de insufficiency venosa and the simple interruption of the cayado will produce a clear improvement, the use of the radio frequency for the cayado seems to me a good solution. ¿Cianocrilato? No experience to decide if you can control thrombosis at a certain point.

# The CHIVA strategy included considerable incisions. What are our thoughts on whether we compare with other options?

The pregunta is complementary to the previous one. ¿Let us keep the safety because it is the sisThe skin's physical and subcutaneous cell drainage system, and this way limits a possible disordered future recurrence and is difficult to treat? Do we want to keep it safe for possible future use in bypass form? Is it a lock or an aesthetic change? It is certain that the CHIVA strategy obliges you to carry out some of the largest incisions carried out for simple phlebectomy. Only the tratarse of the incision at the level of the river and 2-3 strategic incisions at the level of the origin of the insufficient colaterals of the safena. Incisions 2-3 cm long. The patient must consider and discard the various options so that he can freely choose the one he considers best.

#### **BIBLIOGRAPHY**

- Juan Samso J. La cura CHIVA en el tratamiento de las vari-ces primarias de las extremidades inferiores. Madrid: Arán Ediciones; 2019.
- 2. Faccini F. Hemodynamic saphenous preserving procedures in chronic venous disease: Can, and should, we preserve the saphenous vein? Amazon; 2022.
- Franceschi C. Insufficiencia venosa pelvica y de las extremidades inferiores [descarga gratuita en Facebook].
- Cappelli M, Lova RM, Ermini S, Turchi A, Bono G, Bahnini A, Franceschi C. Ambulatory conservative hemodynamic management of varicose veins: critical analysis of results at 3 years. Ann Vasc Surg 2000 Jul;14(4):376-84. DOI: 10.1007/s100169910064
- Tenezaca-Sari Int Angiol 2022 Aug;41(4):332-7. DOI: 10.23736/S0392-

#### 9590.22.04831-3

- Franceschi C. Measurements and interpretation of venous flow in stress tests. Manual compression and Paraná maneuver. Dynamic reflux index and Psatakis index. J Mal Vasc 1997;22(2):91-5.
- Cappelli M, Molino-Lova R, Giangrandi I, Ermini S, Gianesini S. Ligation of the saphenofemoral junction tributaries as risk factor for groin recurrence. J Vasc Surg Venous Lymphat Disord 2018 Mar;6(2):224-9. DOI: 10.1016/d. jvsv.2017.09.005
- Passariello F. Ermini S, Cappelli M, Delfrate R, Franceschi C. The Office Based CHIVA. J Vasc Diagn 2013:1;13-20. DOI: 10.2147/JVD.S49637