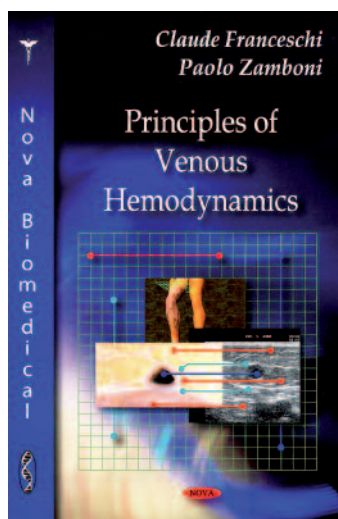




## Book review

PRINCIPLES OF VENOUS HEMODYNAMICS. FRANCESCHI C, ZAMBONI P (EDITS). NOVA BIOMEDICAL BOOKS.2009. NEW YORK. ISBN 978-1-606692-485-3



This 200-page hardback book in glazed paper is divided into 12 chapters, with a total of 284 references, and is prefaced by both E. Rabe, the current President of the Union Internationale de Phlébologie (UIP), and N. Morrison, the elected President of the next UIP Meeting.


For readers unaware of the CHIVA procedure (in French “*cure Conservatrice et Hémodynamique de l’Insuffisance Veineuse en Ambulatoire*—Ambulatory Conservative Hemodynamic Management of Varicose Veins), this book will be quite a surprise both in terms of the terminology used and the concept of varicose vein treatment.

CHIVA was first described by Franceschi in 1988<sup>1</sup> and West European phlebologists are accustomed to the specific terms it uses, as Shunt 0, I, II, III, and IV, venous networks N1, 2, 3, 4, etc., as well as the hemodynamic principles, given that many publications on CHIVA have been published, mostly in European journals.<sup>2-13</sup>

The first chapter is devoted to the physical principles of venous hemodynamics, a reminder of the correlation between pressure and energy and their influence on venous flow according to Catelli’s flow, Bernoulli’s principle, and Venturi effects.

The second chapter is very informative on ultrasound data and introduces the next one on venous compartments and their hierarchical order of emptying in accordance with the five phases initiated by the muscular pump in a healthy individual.

Chapters 4, 5, and 6 deal with pathophysiological mechanisms in chronic venous insufficiency\* and develop the shunt concept, including pelvic shunts, which demands careful attention from the uninitiated. Happily, many figures and diagrams illustrate the different types or modalities of the “private circulation” or venous shunts according to CHIVA terminology. Understanding of this classification is crucial before reading the subsequent chapters.



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\*Chronic venous insufficiency as used by the author is not the appropriate term as there is a consensus to limit its use to C<sub>3</sub> to C<sub>6</sub>\* patients, according to the VEIN-TERM consensus.<sup>14</sup>

Chapter 7 states the CHIVA goal strategy in detail:

- First, preservation of the superficial venous capital as a possible arterial substitute when treating coronary or peripheral arterial disease.
- Second, conservation of saphenous trunks ensures better drainage of the superficial compartment tissues.

Many examples of treatment are displayed according to the various patterns of varicose veins evaluated by careful preoperative duplex investigation.

Chapter 8 describes methods of measuring hemodynamic parameters and what specific information they provide. Chapter 9 entitled “How to perform a duplex mapping” (before CHIVA) is crucial reading if this procedure is to be used properly. The chapter includes 41 color figures as detailed illustrations of clinical cases.

Chapter 10 is illustrated by 46 figures and describes the technical procedures to be performed according to the identified pathophysiological patterns: high ligation, tributary disconnection, hook phlebectomy, etc.

The penultimate chapter presents the results of CHIVA, including clinical findings, duplex scanning results, and health-related quality of life assessment. The last chapter revisits the problem of so-called incompetent perforators.

The purpose of this book review is not to formulate an opinion of the value and effectiveness of the CHIVA procedure, but to provide information on Franceschi and Zamboni’s book. Nevertheless, I would say that whether or not you are a CHIVA supporter or user you will, like me, learn a lot on varicose veins by reading it.

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