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Professor Giorgio Agrifoglio

Giorgio Agrifoglio is born in Genoa in 1932 in a family of doctors: his father, Mario, was a clinical surgeon and his brother, Ernesto, a clinical orthopedist at the University of Genoa. He graduated in 1956 and became a university assistant at the institutes of Pathology and Clinical Surgery led by Professor Edmondo Malan, his master. After a period spent as a research Fellow in Surgery at the Harvard Medical School in Boston (1960-1961),¹ he moved to Milan following Malan as assistant and worked as junior university consultant at the Institutes of Pathology and Clinical Surgery of the University of Milan from 1968 to 1971. In 1971 he was appointed Adjunct Professor of Vascular Surgery, then Associate Professor in 1973, and finally Full Professor in 1976, always in the same discipline. From 1971 to 2004 he led the Institute of Vascular Surgery and Angiology at the Milan *Istituti Clinici di Perfezionamento*, and from 1978 to 2007 he was the director of the Specialization School in Vascular Surgery of the University of Milan. He practiced as specialist in general surgery, angiology and vascular surgery, and was a free lecturer in angiology, surgical pathology and clinical surgery.

As regards the sole activities relating to venous diseases, we must go back to the 1970's and 1980's, when techniques for peripheral arterial revascularization and prosthetic replacements for the correction of aortic aneurysms, as well as the carotid disobliteration, were much widespread in vascular surgery. Venous surgery was considered to be a secondary branch, like phlebology, surgery for young beginners.

In 1978, Professor Agrifoglio was involved by his friend the famous J.T. Hobbs, director of the Surgical Unit and Vein Clinic of the St. Mary's Hospital in London, in the publication of a chapter of the book on the clinical management and treatment of venous diseases entitled *The surgical treatment of varicose veins: a method practiced in Italy*,² with which he restored the correct role of varicose diseases within the framework of experimental vascular surgery as follows:

Vein diseases and their complications are still ranked as minor diseases and the surgical treatment of varicose veins is

wrongly considered to be a minor form of surgery.

Surgical techniques cannot yet be considered as a consistent body of knowledge. This lack of consistency is reflected in the diversity of surgical methods adopted, in the wide variety of instruments available to remove varicose veins, and in the continuous search for better techniques.

In fact, surgical techniques are constantly evolving in an attempt to avoid recurrences and obtain the best aesthetic results without exposing the patient to risk.

As we can see, they talked about wrong notions, spur to continuous research of the best techniques and, in particular, focus on aesthetics avoiding extensive and unnecessary accesses. Let us remember that, at that time, physicians could use only continuous-wave Doppler, without images, so the teaching was, in any case, to perform an accurate hemodynamic study before making the decision whether to elect surgery or exclude it. Clinical examinations and tourniquet tests were absolutely essential, which led to the definitive abandonment of phlebography. The recommendation of the medical schools of the time was to do short or medium stripping, mini-incisions for the tributaries and targeted binding of incontinent perforating veins (Agrifoglio method).

During those same years, the School opened to the CHIVA conservative method of C. Franceschi, who was invited at national and international meetings of experts who alternated monthly during the teaching activity of the Specialization School. After a non-positive experience, we abandoned the method. However, this proves an openness to every form of innovation.

Very few clinicians practiced sclerotherapy at the time in Italy (Bassi, Monina, Trezzi), and Agrifoglio took up a favorable stance after an interview with the famous Brazilian vascular surgeon Worthy, a friend of Malan's, and gave specific indications:

Sclerosing injections can also be used for aesthetic purposes as a complement to surgery and in the treatment of persistent collateral veins following safenectomy.

Sclerotherapy should be considered... not as a substitute for surgery.

Surgical and sclerosing treatments must be associated, because no method alone can achieve a complete and durable result.

Agrifoglio always emphasized a holistic view of the vascular, arterial, venous and lymphatic system, thus showing that he was not only a surgical clinician, but a clinical surgeon. He also considered the contrast between vascular surgeons and angiologists to be a non-sense, as proved by the fact that he always maintained the name of *Institute*

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of Angiology and Vascular Surgery, as still written today at the one of the entrances of the Milan Mangiagalli hospital. He enthusiastically supported the establishment of a clinic dedicated to the study and treatment of skin ulcers (1988), the first in Italy within the framework of a university vascular surgery facility, coordinated by P. Bonadeo. Similarly, a clinic dedicated to vascular diseases in pregnancy was created in the proximity of the obstetric-gynecological ward, also an exclusive facility on the national territory, coordinated by A. Basellini. Agrifoglio set up working groups that would carry on the work done on angiodysplasias, those that had been treated by Malan, with G. Vercellio, as well as on the microsurgery of lymphatic systems, the theme of the late A. Sarcina, and hemodynamic varicocele microsurgery with E. Ippolito. Moreover, the School stood out for a significant experience in the surgery of the obstructed venous outflow syndrome or upper thoracic outlet syndrome, and post-thrombotic syndrome, still with G. Vercellio and G.B. Agus.³

Professor Agrifoglio taught the practice of venous thrombectomy in day surgery under superficial anesthesia in case of varicothrombophlebitis and urged students to disseminate this procedure to general practitioners to avoid the need for emergency care. Just a small incision and squeezing of the not-yet-organized thrombus would suf-

fice to resolve the problem, with no need for suturing but only compression dressing, to be removed after 7-10 days, associated with low-MW heparin: this gave excellent results and was of immediate benefit for the patient.

In a period when the pharmacological treatment of chronic phlebopathies was not accepted by all, Professor Agrifoglio promoted studies on phlebotonics, later called phlebotropic drugs, decades before Evidence-Based Medicine, thus contributing to the spreading of the medical treatment of chronic venous diseases of the lower limbs, today a well-known and confirmed option.

That was also the time of the book *Flebologia*⁴ and the organization of the National Congress of the Italian Society of Phlebology (1991), as well as other similar successful initiatives.

His words on general theme of the gimmicks and tricks of vascular surgery are quite explicative: *Surgeons must practice a lot to become skilled professionals and expertise is obtained with study, work, passion, observation, verification, patience and a great amount of time... The occurrence of unforeseen difficulties or unusual complica-*

tions is controlled with knowledge, craft, imagination, but also with tricks or gimmicks (that are not reported in books). You will not become a good surgeon without curiosity and spirit of sacrifice. The touch of the Master's hand; the importance of practice and knowledge of tricks handed down or learned through the exchange of experiences, but there is an indispensable component for success in surgery, one that is difficult to explain and beyond any dissertation: the Goddess Fortune.

I will conclude with a few considerations that summarize the legacy of Master Giorgio Agrifoglio for us all.

At the celebration of the 30th anniversary of the foundation of the Institute of Vascular Surgery and Angiology of the University of Milan (1971-2001):

The work of a surgeon simultaneously involves profession, art, and science.

Profession because the habits, the consolidated gestures used in treating patients, are transferred into daily life.

Art because this daily practice always implies commitment, resourcefulness, sensitivity and creativity.

Science because, after learning the profession and the art, we inherit the insights,

ideas and tricks of our masters, those that they have acquired with experience in the field, creating the larger and increasingly extensive legacy of knowledge we receive, in the awareness that we will have to transmit the knowledge acquired, further developed and modernized, to our students.

One last tip: Study, study, keep studying - always. Giorgio Agrifoglio

References

1. Agrifoglio G, Edwards EA. Results of surgical treatment of varicose veins: one-to fourteen-year follow-up study of 416 patients. *JAMA* 1961;178:906-11.
2. Agrifoglio G. The surgical treatment of varicose veins: a method practiced in Italy. In: Hobbs J, ed. *The treatment of venous disorders*. Lancaster: MTP Press Ltd; 1977.
3. Agrifoglio G, Agus GB, Lorenzi G. Saphenous vein transplants and graft for treatment of deep chronic venous thrombosis. *Folia Angiologica* 1978; 26:28.
4. Agrifoglio G, Montorsi W, Donadi GC. *Flebologia*. Milano: Masson; 1983.