The Objectives of EVF HOW

To educate, train and update learners (the delegates) in the current clinical management of patients with venous disease by close informal interaction with venous experts during lectures, case discussions and hands-on activities in small groups.

At the end of this course the learner (delegate) should be able to:

• identify venous disease in patients,
• apply appropriate venous investigations,
• construct a plan for management,
• understand different interventional procedures,
• successfully incorporate treatment of venous patients in his/her practice,
• realize when to refer a patient for expert care.

EVF HOW FORMAT

The EVF HOW mission statement is “Education and hands-on practice for the benefit of patients with venous disease.”
disease. The goal is to provide understanding of modern practical management of venous disease and hands-on training of modern procedures. An integral partner in this effort is the providers of different devices, sclerosing agents, stockings, bandages, ulcer care materials, ultrasound machines etc. The objectives of the EVF HOW are impossible to fulfill without this partnership. The instruction of learning has from the start been structured on a few principles, which are important for the success of the Workshop:

- the number of learners is limited to 100 to facilitate interaction between instructors and delegates and thus the faculty/learner ratio is high – 1/3,
- the hands-on sessions are largely truly hands-on for the delegates, not small lectures or only a demonstration of procedures,
- all learning sessions are informal in a relaxed setting to allow uninhibited communication between delegates, faculty members and industry representatives,
- plenty of time is set aside for discussion with the greatest interaction occurring at the workshop stations,
- the learners are encouraged to bring their own cases for presentation and discussion, there is no exhibition or parallel activity.

The format of the EVF HOW in 2018 will be similar to previous years including formal lectures, case discussions and interactive video demonstrations on different treatment techniques and duplex scanning, covering acute and chronic venous diseases. The focus will be on hands-on training on procedures and devices. Faculty members in collaboration with the industry experts will instruct at 24 workshop stations. The delegates will attend each workshop station during 30 min in small groups (maximum 4-5 delegates), giving each participant time to try out devices, practice bandages etc.

LEARNING ENHANCED BY ASSOCIATED WEBSITE

In 2013 the EVF HOW website was introduced. This is a web-based password-protected portfolio. Each learner participating in the EVF HOW has access to the presentations, important references and guidelines, case reports for discussion, videos of procedures supplementary information about the workshop stations and other study material. Access is available for one year after the Workshop. This gives the learners a possibility to go back and reinforce and enhance their learning experience. Additional material will be added during this year. The response has been very positive from the learners and the website is increasingly used. Most learners used the website before the start of the Workshop and accessed it during the Workshop. Participants agreed that the EVF VIP was a valuable supporting tool especially by giving access to the presentations on-line, having references and guidelines in pdf format available, and to be able to return to posted video material.

A REPORT FROM 8TH EVF HOW 2017 IN KRAKOW, POLAND

The 8th EVF HOW took place at the Holiday Inn Hotel in Krakow, Poland, 26-28 October, 2017. This facility was excellent for our needs. Dr. Tomasz Kleszczyński and his local team had worked hard to make excellent local arrangements and provided excellent patients for the training. The primary reason for attendance by the majority of learners was to update overall knowledge about venous disease and its treatment. In an assessment after the course, the overwhelming majority of the delegates indicated that the course had fulfilled their educational goals and expected learning outcomes (98%). The didactic sessions were much appreciated and considered useful by 93-100% of delegates, for the different sessions. The learners felt the workshop stations achieved all or most of the stated goals between 94-100% at each station. Their over-all expectations were met in 96% and as much as 94% of the learners stated the information they learnt would be implemented in their practice, which is really promising!

More than half of the delegates were vascular surgeons (57%) followed by other specialties such as general surgery (12%), interventional radiologist (7%), angiology (6%), phlebology and cardiovascular surgery. Although the majority of learners came from Europe (85%), with Poland at the top representing 19% of all learners, other countries and continents were represented, as previous years (Middle East 9%, and some delegates from China, Colombia, Australia and New Zealand).

THE PROGRAM OF EVF HOW 2017

The instruction at the 8th Hands-on Workshop on Venous Disease, 2017, was provided by an international faculty with 33 experts from Europe and the USA. They not only gave presentations, but also actively discussed case presentations and were an integral part of the workshop giving practical tips and tricks from their own experience. The clinical input by the faculty members balanced well the specific device information presented by the industry representatives.

PRESENTATIONS AND LIVE DEMONSTRATIONS

The presentations spanned the following subjects:

- Basic principles of venous pathophysiology; accuracy of tests; and classification and assessment of treatment outcome.
- Treatment of varicose veins conservatively with drugs and compression; with invasive procedures such as saphenous ablation with laser, radiofrequency, steam,
foam sclerotherapy, pharmaco-mechanical means and open surgery; in addition techniques preserving the saphenous vein were highlighted. The controversies of the perforators were elucidated, interventions for recurrent or residual varicose veins (PREV AIT – Presence of varices after intervention) and pelvic congestion syndrome (PCS) were debated.

- Guidelines for prevention and treatment of venous thromboembolism (VTE) and superficial vein thrombosis (SVT).
- Treatment of acute VTE with traditional conservative measures, direct oral anticoagulants, catheter-directed thrombolysis and pharmaco-mechanical thrombectomy was described and outcome reported; the role of IVC filters was also presented.
- Diagnosis and treatment of chronic venous insufficiency using a sequential treatment plan was presented, focusing on management of venous ulcers in clinical practice, the use of compression, treatment of deep venous obstruction and the role of valve reconstruction in limbs with primary deep venous reflux or post-thrombotic disease.

A live demonstration of duplex ultrasound scanning (DUS) of the deep venous system was performed to show the optimal investigation of patients with suspicion of acute DVT and with chronic venous disease, later to be practiced during the DUS workshop stations.

**AWARD FOR THE BEST CASE REPORT**

The case discussions continue to be a popular component of the meeting and allow for the subtleties of patient treatment to be bought out in the interactive discussion between the faculty and learners. A wide range of cases were presented illustrating the previously given lectures: about varicose veins, pelvic vein incompetence, superficial vein thrombosis, acute iliofemoral DVT, chronic outflow obstruction, venous ulcer management, combined obesitas and lymphoedema etc. To encourage the learners to bring their own cases, the participant having the best presentation received an award of EURO 500. This year the prize was awarded to Dr. Marina Dias Neto for her presentation about “A 35 year old woman with left limb oedema and dyspareunia”. Each case was presented in stages and the moderator encouraged the faculty and learners to join in at all stages, which lead to lively discussions.

**HANDS-ON WORKSHOPS**

As previously emphasized, this component of the EVF HOW is the most important. The function of the device or the method presented at each workshop station was explained in detail by the industry expert. Its role in the treatment of venous disease and personal clinical tips and tricks were highlighted by the faculty member. Each learner trained hands-on, whenever possible, under expert supervision after a short demonstration.

In **Workshop 1** our learners discovered advanced therapy solutions for venous leg ulcers, received tips and tricks for radial laser ablation, learned how to make good quality foam with sodium tetradecyl sulfate and tried out mechano-chemical ablation (MOCA) with a recently introduced new device.

In the first station of **Workshop 2** a new venous stent was demonstrated in a venous anatomy model. Participants further learned about thrombectomy and coiling procedures, then moved to another foam sclerotherapy station, where polidocanol was used for foam preparation and injection of tiny spider veins was practiced. They ended this workshop by receiving more details about venous valve repair.

In **Workshop 3** delegates placed a catheter for medical adhesive ablation in a leg simulator, then looked at the specifics of another dedicated venous stent Vena stent, which they could insert in an iliofemoral venous anatomy model. They were also trained in pharmaco-mechanical ablation, performing a mock treatment and learned all details about miniphlebectomy, from proper indications to practical details and potential complications.
In Workshop 4 placement of yet another venous stent was practiced and its unique requirements were discussed. Then the learners were trying out long- and short-stretched medical compression stockings, measuring the actual working pressure of the stocking. In the next station they were made familiar with steam ablation of varicose veins and in the last one with Intravascular Ultrasound (IVUS), learning how to interpret IVUS images.

In Workshop 5 intermittent pneumatic compression of the lower extremities was demonstrated and in the next station strong short-stretch compression bandage was applied by each learner on another, so everyone could experience what a correctly applied bandage feels like. Then saphenous radiofrequency ablation was practiced including how to accurately place the catheter tip and how to ablate the vein in a leg simulator, while the 4th station focussed at the therapy chain for venous leg ulcers, consisting of debridement and compression.

Finally, in Workshop 6 the learners performed live imaging in patients with different types of vein pathologies. Professor Tomasz Kleszczynski had collected numerous patients from his practice, well representing a variety of disease. Apart from practical tips about how to position the patient properly, use appropriate transducers, know imaging principles and optimize the image, the learners had the real ‘hand-on’ experience, investigating patients with several types of superficial and deep venous problems.

**EVF HOW PLUS REPORT 2017**

In 2017, 4th EVF HOW Plus courses were organized. The formula of the EVF HOW Plus courses, is small participant groups with stimulating programs containing inter-active elements and practical aspects. Education is provided by some world renowned experts which guarantees a high level of participant experience and satisfaction.

On the 8th and 9th of May 2017, at the Department of Vascular Surgery in Modena, Italy; The EVF HOW Plus Vein Valve Reconstruction Course was organized by Prof. Oscar Maleti and Dr. Marzia Lugli with 4 participants. This course offers a unique experience, whereby
participants gain knowledge from a world leading Centre in this particular field, of venous disease treatment. The participants were taught about diagnostics, qualification and procedure performance in the cases of vein valve reconstructions in primary and secondary venous disease.

On the 4th and 5th of September in the Department of Vascular Surgery in Modena, the EVF HOW Plus course was dedicated to the practical aspects of Venous Stenting and organized by Marzia Lugli and Oscar Maleti again. This was an excellent opportunity for 4 qualified participants to improve their practical skills in venous stenting procedure and performance. Several venous stenting procedures were performed where the participants had an opportunity to scrub-in.

On the 8th and 9th of November the EVF HOW Plus Venous Stenting Training Days were organized by Dr. Stephen Black and his team, at Guy’s and St Thomas’ Hospital, London UK. The London course was supported by another world well known leader in the field of the local thrombolysis – Professor Niels Baekgaard from Copenhagen, Denmark. 20 participants had an opportunity to see and discuss many live deep venous cases as well as to obtain the detailed knowledge about the indications, qualification and techniques of venous stenting procedures as well as, local thrombolytic treatment. The role of IUVS as well as dedicated venous stents was also presented and discussed.

On 1st and 2nd December, in Malmö, Sweden, 8 participants took part in another EVF HOW Plus course on Venous Ultrasound. The course director was Dr. Anders Lundell and the participants had an excellent opportunity to examine venous patients with the assistance of the experts in the field of US diagnostics of vein pathology. The course was very practical, and the main goal was to improve the skills of the participants in venous US performance and interpretation of findings.

In 2018 EVF HOW Plus program will continue with a variety of practical courses covering different topics of venous disease, diagnostics and treatment.