

American Venous Forum

Promoting venous and lymphatic health

Want to receive monthly updates? Click here to be added to the email

INSIDE THIS EDITION

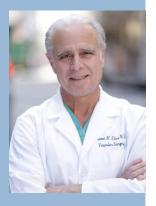
- 2 Message from the Editor Hell
- 3 The Eye of the Storm
- 4 Get to Know our Newly Appointed President, Harold "Hal" J. Welch
- 6 VENOUS2020, the 32nd Annual Meeting of the American Venous Forum
- 8 Highlights from Day of Science VENOUS2020
- 10 Villavicencio Symposium: Advances In Pelvic Venous Disease (PEVD)
- 14 Top Abstracts and Late Breaking Trials A Closer Look
- 16 Highlights from the International Session
- 18 AVF Gala Dinner
- 21 AVF Member Community

VEIN SPECIALIST NEWSLEHTER

Annual Meeting Highlights Issue Part II

April 2020 | veinforum.org





INSIDE THIS EDITION

Message from the Editor – Hell 2	
The Eye of the Storm 3	
Get to Know our Newly	
Appointed President,	
Harold "Hal" J. Welch 4	
VENOUS2020, the 32nd Annual	
Meeting of the American Venous	
Forum 6	
Highlights from Day of Science 8	
Villavicencio Symposium:	
Advances In Pelvic Venous	
Disease (PEVD) 10	
Top Abstracts and Late Breaking	
Trials – A Closer Look 14	
Highlights from the International	
Session 16	

MESSAGE FROM THE EDITOR - HELL

Steve Elias, MD

"Lasciate ogne speranza, voi ch'intrate." COVID-19 has transformed the world into Dante's Inferno. With the poet Virgil as his guide, Dante begins his descent into hell. These words are seen over the gates. Loosely translated they mean, "Abandon all hope, ye who enter here." How hopeful were we at our annual meeting? The world has changed for now. But the world will not always be like this. Virgil guides Dante through the nine circles of Hell, then Purgatory, and finally Paradise. He does ultimately get to Paradise. We are all on a modern version of Dante's canon, The Divine Comedy. While we may feel as if we are in the first circle of Hell, the Abyss (limbo), this issue of VEIN SPECIALIST helps to keep us focused as we travel.

Also in this issue, we take a deeper dive into the content of our annual meeting. We will highlight talks that our committee members, and a few others, feel are worth exploring. Take a break from the Inferno journey and see what happened at our last meeting. Obviously, time is a jet plane, it moves too fast. Our meeting was not that long ago. This issue brings you science, facts and academia. Our writers have succinctly summarized key talks and presentations so even if you didn't attend a certain session, you still have some take-aways.

Also, in this issue we begin a new section called: AVF Member Community. It will bring us information on a monthly basis regarding new members, changes in member status such as distinguished fellows, international members, and other important member facts we feel you need to know about. But life is a combination of facts and feelings. Read this issue for the facts.

Finally, we need your input for a special issue coming out in the next few weeks the feelings we've all be dealing with as a result of the inferno called COVID-19. At some point, life is a compromise. Share the compromises you and your colleagues have made and what you think may be helpful or interesting for all of us. Tell us what's been going on with you, your family and your patients. Let us know what's been happening at the hospital and with co-workers. Practical suggestions and emotional stories. It need not be lengthy or academic. Short and human is what we're looking for. Send your stories to covid-19@veinforum. com.

Remember, Dante ultimately arrived in Paradise. Together we will. Be safe and be healthy.





Anil Hingorani, MD

INSIDE THIS EDITION

Message from the Editor – Hell 2
Message from the Editor – Hell 2 The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AVF Gala Dinner 18
AVE Member Community 21

THE EYE OF THE STORM

Anil Hingorani, MD

I live and work in New York City, and our area is now experiencing the surge in COVID-19 cases and deaths. Our hospitals are starting to overflow. We are running out of central lines, ventilators, intravenous medications for sedation, ICU beds, personal protection equipment, and space. Our staff is falling sick and being home quarantined. This means ALL HANDS ON DECK. The second line staff are trying to help as much as we can to support the ER and the ICU staff. Not having taken care of a common cold in a patient for 30 years, I am not certain if I feel more sorry for myself or for my patients!

All elective cases are cancelled and urgent cases that cannot wait three months, need to be cleared by our surgeon-in-chief. Outpatient visits have all been changed to virtual visits and only urgent cases are seen in person (with a mask for all providers).

We are getting an average of ten emails every day to update us on the everchanging status and protocols. These come from the inpatient and outpatient departments, administration, Department of Surgery, Department of Health and the State. Some of the information contradicts the protocols from a few hours ago. This leaves practitioners confused and frustrated.

During all of this, I have learned that we need to remain flexible to deal with these constant challenges. Just this morning during a case, myself and one of the residents were working on how to make a central line kit out of other supplies to replace the kits that we are running low on. While initially, we may not be as comfortable working in areas that we do not usually encounter regularly, by the second or third session it starts to become more familiar. The virtual visits that we found cumbersome at first are becoming quite routine and efficient. We may even incorporate these into our practice after this crisis. The extra time that is availed to me has allowed me to work on projects that are long overdue. I can work with some with of my trainees on their research. I can even start to take my trusty old bike out to Coney Island beach again!

This will not be the last challenge we face in our medical and personal careers, nor in our personal lives. Last week I was discussing COVID-19 with one of the young trainees who was very nervous about it. I explained that we have faced this type of issue in the past and there will be other unprecedented challenges in the future. We will muddle through them, but need to adapt to the changing landscape. We will make it through these dark times and will be stronger for it.

Be Well and Stay Safe.





John Forbes, MBA

INSIDE THIS EDITION

GET TO KNOW OUR NEWLY APPOINTED PRESIDENT, HAROLD "HAL" J. WELCH

John Forbes, MBA



Hal was born and raised in Albany, NY. It seems he was destined to be in the medical field as his father was a general surgeon - Professor of Surgery, and Chief of Surgery at the Albany VA hospital and his mother was a nurse. He is the middle child of five. Growing up, he enjoyed sports and played baseball and basketball through high school career where his teams won league titles as a senior. While in high school, Hal's first job was a shoe salesman at Shoe-Town. After graduating high school, Hal went on to Tufts University where he completed his undergraduate degree (Bachelor of Science) in

Biology and graduated Magna Cum Laude. Following Tufts, Hal went to Albany Medical College on a Navy Scholarship and completed his internship at Oakland Naval Medical Center in California. He was selected for outservice training and completed his residency at Tufts-New England Medical Center and served as the Administrative Chief Resident in General Surgery. After his residency, he spent a year in Keflavik, Iceland as the Director of Medical Services at the U.S. Naval Hospital.

Hal went on to be the Chief of Vascular Surgery at the Portsmouth Naval Medical Center for two years after his vascular fellowship. After leaving the Navy, he returned to Tufts-New England Medical Center for three years before moving to the Lahey Clinic outside Boston in 1997, where he was the Program Director for the General Surgery Residency for 11 years. He is currently a Senior Vascular Surgeon at Lahey as well as Chair of the Graduate Medical Education Committee. During his exceptional career as a surgeon and venous disease expert, Hal has contributed extensively to the field of venous and lymphatic disease through numerous publications and presentations.

Hal's AVF leadership journey began in 1991. On an invitation from his mentor and past AVF President, Tom O'Donnell, Hal attended his first AVF meeting as a Vascular Surgery Fellow. He was accepted as a member in 1994, awarded the Sigvaris Traveling Fellowship in 2000 which he considers to be one of the highlights of his career,



Hal was selected as a Distinguished Fellow in 2016. He has served as a member or Chair of numerous AVF Committees and joined the AVF Board of Directors in 2014.



GET TO KNOW OUR NEWLY APPOINTED PRESIDENT, HAROLD "HAL" J. WELCH continued

John Forbes, MBA

Outside of work, Hal is happiest seeing his grandchildren ages six, four and two, traveling and spending time with his wife Cindy. He is also working on lowering his current golf handicap of 14. When time allows, he and his family spend time on Cape Cod, or a trip to the Adirondacks for trout fishing. This sports fan roots for the Red Sox, Celtics and the Green Bay Packers, and makes a yearly trip with his daughter Callie to catch a Packers game.

Hal and Cindy have three daughters. Lauren is a Registered Nurse studying to become a midwife. Lindsey, a medical assistant, and Callie is the Manager of Alumni Relations for the Las Vegas Raiders.

By cooperating with other venous societies, increasing AVF



membership, expanding our outreach to and education of the public, and by empowering and supporting AVF committees, the AVF, under Hal's leadership, will pursue its most worthy mission with a renewed energy and commitment.



Great leaders have a compelling vision for their organizations and Hal joins an esteemed group of Past Presidents with his vision of advancing the AVF as the worldwide leader in the science and treatment of venous disease.

Please welcome Hal Welch, MD, your 33rd President of the American Venous Forum.



- Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch 4 VENOUS2020, the 32nd Annual Meeting of the American Venous Disease (PEVD) 10 Top Abstracts and Late Breaking Trials – A Closer Look 14 Highlights from the International
 - AVF Gala Dinner 18





VENOUS2020, THE 32ND ANNUAL MEETING OF THE AMERICAN VENOUS FORUM

Patrick Muck, MD, VENOUS2020 Annual Meeting Program Chair

President Brajesh Lal, MD, AVF leadership, members and non-members, and our colleagues from industry recently convened at the AVF Annual Meeting, VENOUS2020, held at the OMNI Plantation Resort in Amelia Island, FL. The AVF's mission, for over three decades, has been to advance science, education and advocacy in venous and lymphatic disease. This annual international gathering brought venous practitioners and key opinion leaders from all around the globe to learn, promote and fulfill the mission of the AVF.

VENOUS2020 began on Sunday, March 1 with the annual meeting of the C-TRACT Trial's investigators and research coordinators. On Tuesday, March 3, Fedor Lurie, MD, Past President of the AVF, led the Day of Science and Innovation with a record attendance of 94 registrants. March 4 to 6 showcased the best in venous and lymphatic research and disease management during our scientific session.

Well over 400 attendees representing physicians, Allied Health professionals, medical students and residents, affiliate members and industry partners from 19 countries attended VENOUS2020. Included in this group were 28 Distinguished Fellows of the AVE

The Scientific Program Committee painstakingly and carefully reviewed and scored 112 abstracts. 60 of these Abstracts were selected for Oral Presentation and 43 were selected for Poster Presentation.

I am humbled by the commitment and dedication of this Committee who helped deliver an outstanding program – and extremely appreciative of their hard work.

Some of the exciting features of the meeting included:

- An international session designed by Drs. Jorge Ulloa and Lowell Kabnick that included 12 invited abstracts from around the world.
- The Sumner Session, developed by Dr. Hal Welch, had exciting presentations by many of the AVF's Past Presidents.
- The Villavicencio Symposium, moderated by Dr. Tony Gasparis, featured a comprehensive assessment of Pelvic Venous Disease.
- An interactive live ultrasound session entitled, "Ask the Expert" was moderated by Dr. Steve Elias and Dr. Dan Monahan.
- Late Breaking Trials, developed last year by Dr. Ellen Dillavou, highlighted what's new in venous technologies from our Industry partners.
- The Early Career Session, led by Dr. Kathleen Ozsvath, featured a hands-on experience with the latest venous technologies.

INSIDE THIS EDITION

Message from the Editor – Hell The Eye of the Storm Get to Know our Newly Appointed President, Harold "Hal" J. Welch VENOUS2020, the 32nd Annual Meeting of the American Venous



VENOUS2020, THE 32ND ANNUAL MEETING OF THE AMERICAN VENOUS FORUM continued

Patrick Muck, MD, VENOUS2020 Annual Meeting Program Chair

Finally, the AVF Annual Meeting Program Committee would like to congratulate the winners of the best paper, best international paper and best poster.

"Prosthetic Valve for Post-Phlebitic Syndrome" presented by Drs. Jorge Ulloa, Marc Glickman, (Bogota, Colombia), won Best Paper. Their exciting work gives a glimpse of the future of prosthetic valves for our patients.

"Comparison of Two Clinical Scales to Assess the Post-Thrombotic Syndrome: Secondary Analysis of a Multicenter Randomized Trial of Pharmacomechanical Catheter-Directed Thrombolysis for Deep Vein Thrombosis," presented by Drs. Angela Lee, Chu-Shu Gu, Suresh Vedantham, Clive Kearon, Mark Blostein and Susan Kahn won Best International Paper. This research provides much needed work on the clinical assessment of patients inflicted with Post-Thrombotic Syndrome.

"Health Insurance Coverage for Endovenous Ablation of the Saphenous Vein in Patients with CEAP Clinical 3(C3) Disease: An Analysis of One State's Insurance Policies," presented by Drs. Alan Dietzek and Stephanie Stroever (Danbury CT), won Best Poster. Their work is valuable to ensure coverage for patients with symptomatic venous disease. Congratulations to all the winners!



- Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch VENOUS2020, the 32nd Annua Meeting of the American Venous

- Disease (PEVD) 10 Top Abstracts and Late Breaking Trials A Closer Look 14 Highlights from the International



HIGHLIGHTS FROM DAY OF SCIENCE



Anil Hingorani, MD

INSIDE THIS EDITION

Message from the Editor – Hell 2
The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AVF Gala Dinner 18
AVF Member Community 21

Anil Hingorani, MD



One of the highlights of the American Venous Forum annual meeting is the Day of Science. This is a unique part of the meeting, focused on the basic science of venous and lymphatic disease. Originally envisioned and developed by AVF Past President, Fedor Lurie, the Day of Science brings together leaders in the clinical sciences, basic science, industry and government to focus on the knowledge, gaps, bridges and the future of venous and lymphatic disease. It is truly one of the jewels of this meeting. This article reviews only some of the highpoints of this exciting meeting.

"Before The Reflux" was the title of Dr. Joseph Raffetto's session. We know that varicose veins have significant changes in their structural wall components. Changes consistent with increased collagen and decreased elastin are present along with significant changes in laminin, tenascin, and decreased collagen type III, which are associated with morphological changes and clinical reflux within the vein segments. Early on, there are mechanical and chemical changes that predispose the vein wall to alter its normal structural integrity, and leading to dilation, valve insufficiency and clinically apparent reflux on ultrasound. What are these ultrastructural changes? Shear stress on the endothelial glycocalyx provides integrity and balanced homeostatic function. Decreased shear stress leads to activation of leukocytes with attachment, adhesion molecule expression (selectins and integrins) and inflammation within the venous wall. With persistent stimulus, there begins to evolve microscopic changes to the endothelium, with attachment of red blood cells, disorganization and irregular orientation of endothelial cells, leading to expression of pro-inflammatory pathways including CD31/PECAM, CD146, and ICAM-1 and transmigration of leukocytes in the vein wall. These events promote vein wall architectural changes and degradation of normal structure. Contraction of vein wall segments of normal appearing saphenous vein, behave similarly in physiologic function to those that are pathologic in appearance (dilated and tortuous) and refluxing. Importantly, these early events can be seen in normal non-refluxing veins, in the same patient with varicose veins, with increased vein wall thickness as a marker of venous wall change well before the presence of reflux. Finally, non-invasive means with shear wave elastography assessing for vein wall stiffness, demonstrate that shear wave values are increased (stiffer vein wall) in patients that have symptoms of venous disease in both refluxing and non-refluxing vein segments compared to asymptomatic subjects. Taken together these data indicate the important changes occurring on the endothelium, with structural and biochemical changes within venous segments well before reflux is evident. These data elucidate the pathology of venous insufficiency and may have impact of future treatment options.



HIGHLIGHTS FROM DAY OF SCIENCE continued

Anil Hingorani, MD



Dr. Andrew Nicolaides from the Imperial College of London spoke on CO disease. As usual, his talk was clear, clinically relevant and broke new ground. CO disease consists of symptomatic patients with no palpable or visible signs of venous disease. This entity is seen regularly by venous practitioners but remains poorly understood. By using a new and improved videocapillaroscopic technique, the orthogonal polarization spectral imaging technique, his group demonstrated that quantitative measurements in the skin microcirculation are progressively altered from C1 to C6 patients and that values in CVD patients are

significantly different from healthy individuals (P < 0.05). In addition, significant changes were shown between COa and COs patients despite the presence of normal conventional duplex scans in the latter; a decrease of functional capillary density and an increase in the diameter of the dermal papilla. Finally, some explanation for some of these patients' clinical findings and a route to better understand CO pathophysiology.

In another session, Dr. Charles Serhan from the Brigham and Women's Medical Center examined new mediators in the resolution of thrombus. Specialized proresolving mediators (SPMs) are temporally biosynthesized during the resolution phase of acute inflammation and venous thrombosis progression. SPMs are a superfamily of lipid mediators that include the resolvin , protectin and maresin families biosynthesized from EPA and DHA the omega-3 essential fatty acids. Each of the main SPMs are pro-resolving and anti-inflammatory, as well as enhance the clearance of microbes and cellular debris. Their structures and potent functions have been confirmed via total organic synthesis and in a wide range of animal disease models. SPM are commercially available for study. SPMs are produced in humans on acute challenge and active resolution of acute inflammation. SPMs are temporally produced during thrombosis and resolvin D4 reduces venous thrombosis burden in mice. The importance of these data is that it is focused on the resolution of thrombus which remains a field of great potential in the clinical arena with very little data.

The audience was engaged and during most sessions attendees were not able to get all of their questions answered from the microphones. After the sessions, speakers continued to engage with audience members about their new and exciting work. This remains as one of my personal favorites as I always come away with new ideas, questions and directions to explore for the future.

Message from the Editor – Hell 2 The Eye of the Storm 3
The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AVF Gala Dinner 18
AVF Member Community 21





Haraldur Bjarnason, MD

INSIDE THIS EDITION

Message from the Editor – Hell 2
Message from the Editor – Hell 2 The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
- Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AVF Gala Dinner 18
AVF Member Community 21

VILLAVICENCIO SYMPOSIUM: ADVANCES IN PELVIC VENOUS DISEASE (PEVD)

Haraldur Bjarnason, MD

The first presentation was Pelvic Venous Anatomy and Pathology given by Dr. Neil Khilnani. Dr. Khilnani proposed the term "Pelvic Venous Disorders (PeVD)" be used when what has been referred to as Pelvic Congestion Syndrome. Dr. Khilnani made an argument for this new term being an inclusive term for all venous disorders which make up pelvic venous hypertension:

- 1. Ovarian vein reflux
- 2. Renal vein compression
- 3. Iliac vein compression
- 4. Iliac vein reflux

Dr. Khilnani maintained that the term encompasses the "syndromes," Pelvic Congestion, Nutcracker and May Thurner, and that these should be discussed together because of their interrelated physiology. He also discussed the complexity of pelvic pain and presented data to support that there were often several different pain generators at play in the same patient when they present for evaluation. This incites dysfunctional pain perception secondary to a central nervous system neuro-processing issue. In some patients a secondary pain generator may be activated, which may explain why some fail to benefit from elimination of the original pain generator. These patients have increased pain sensitivity, which can explain why some patients with similar pathology can have symptoms and others not.

The second talk was on Classification of Pelvic Venous Disorders given by Dr. Mark Meissner. He pointed out that there is not a practical clinical classification system developed by a broad inter-disciplinary group for PeVD. The working concept is a clinical instrument which would define a population, in this case patients with symptoms of PeVD. The instrument would stratify patients based on similar clinical features, natural history and how they respond to treatment. A system which would be discriminative and to some degree similar to the CEAP venous scoring system, but not a symptom severity score as the VCSS. An interdisciplinary group has been working on such a system, a patient centered instrument, not organ centered. The new system will be called SVP, S standing for symptoms, V standing for Variceal Reservoirs and finally the P for Pathology. The Pathology component consisting of three domains, anatomy (A), hemodynamic abnormality (H) and etiology (E). The S is divided into S0, no clinical manifestation, S1 renal symptoms, S2 with venous chronic pelvic pain.

The third talk was given by Dr. Nicos Labropoulos. The title of his talk was "Protocol in Ultrasound Imaging of the Pelvic Veins." He pointed out that most patients with pelvic venous disorders are very thin. For example, patients with ovarian vein reflux have a BMI<25 on average and those with left renal vein



VILLAVICENCIO SYMPOSIUM: ADVANCES IN PELVIC VENOUS DISEASE (PEVD) continued

Haraldur Bjarnason, MD

compression have a BMI < 23. This makes ultrasound imaging much easier and allows the ultrasound examiner to evaluate all of the pertinent imaging points for PeVD. He advised examining the perineal area using the perineal window to evaluate the pelvic floor venous exit sites in a standing position as well as the groins, looking for posterior-medial collaterals which drain independently into the thigh and the anterior collaterals which communicate with the SFJ. In the supine position, the left renal vein (evaluated for diameter at the site of compression and diameter of the normal renal vein segment calculating the ratio between those two diameters). A ratio of > 5 is considered abnormal, and both ovarian veins can easily be evaluated for diameter and flow direction on ultrasound. He also pointed out that the iliac veins, the CIV's, the IIV's and the EIV could be easily evaluated for compression. He encouraged practitioners to try this out and with experience the exam becomes easier, but there is a learning curve.

Next to speak was Dr. Ronald Winokur. His topic was: Do You Need Axial Imaging? When and Why? Briefly Dr. Winokur presented a few clinical imaging publications which demonstrated that ultrasound has high sensitivity and positive predictive value for left ovarian vein reflux. He also cited a study which demonstrated that time resolved MRI had 100% agreement with venography with regards to ovarian vein reflux and another paper which demonstrated that MRV agreed with venography in 96% of cases when it comes to the general venous anatomy pertinent to pelvic vein pathology. He ended his talk by citing an article by Dr. Labropoulos et al. which described an algorithm which his institution follows. Ultrasound is the first study they perform on all patients being worked up for pelvic vein pathology. If it is diagnosed, the patient is taken to venography with intervention if pertinent based on the ultrasound findings alone. If, on the other hand, the ultrasound is not diagnostic, a CTV or MRV are is obtained. He also pointed out that MRV is almost four times as expensive as an ultrasound is, something that needs to be taken into consideration.

Dr. Antonios Gasparis spoke on Treatment Algorithm and Technical Steps in Pelvic Reflux. He started off by splitting pelvic venous disorders based on the underlying pathology into pelvic reflux and pelvic obstruction. He then made a distinction based on anatomic clinical presentation simply as either leg symptoms alone, pelvic symptoms alone or combination of those two. For patients with, what he refers to as compensated pelvic venous hypertension, (defined as reflux into the pelvis with reflux into the legs through trans pelvic collaterals), and which have leg symptoms but no pelvic symptoms, he advises to do ultrasound guided sclerotherapy and/or micro-phlebectomy of the symptomatic leg veins. If, on the other hand, the symptoms are pelvic in nature or the patient has been treated for predominantly lower extremity symptoms with sclerotherapy but present with early recurrence, he advises treatment of the pelvic venous pathology. The

Message from the Editor – Hell 2
The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
leeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
op Abstracts and Late Breaking
Trials – A Closer Look 14
lighlights from the International
Session 16
AVF Gala Dinner 18
AVF Member Community 21



VILLAVICENCIO SYMPOSIUM: ADVANCES IN PELVIC VENOUS DISEASE (PEVD)

Haraldur Bjarnason, MD

treatment is usually sclerotherapy of both ovarian veins and the pelvic varicose veins with coil embolization to follow. For the internal iliac veins, he advices balloon occlusions venography and sclerotherapy with balloon occlusion without coil embolization.

Dr. Kush Desai then talked on the topic of Non-thrombotic iliac vein lesions (NIVL) in the setting of pelvic vein congestion (or PeVD): Should I Stent and When? Dr. Desai pointed to two publications which have looked at outcomes of iliac vein stent placement for pelvic vein congestion. In one of the papers, out of 227 patients, 80% were found to have associated NIVL. Both papers noted significant improvement in the visual analog pain scale following treatment of the NIVL with stents. In several of the patients a combination of ovarian vein sclerotherapy/ embolization with iliac veins stent placement was performed. The "devil is in the details,"Dr. Desai said, meaning that it is not clear if the ovarian veins should be treated first and then the iliac veins stented if no improvement, or maybe both should be treated simultaneously. The answer to this is not known and will have to await the outcome of a matched cohort trial. Dr. Desai's approach is to treat compensated venous reflux first with ovarian vein sclerotherapy and embolization, and if the symptoms persist at six to eight weeks, treat the iliac vein stenosis with stent. In the case of an uncompensated (no reflux thru the pelvic floor) situation, he is more likely to perform the iliac vein stent procedure first or both at the same time. He stated specifically that he was not ready to abandon ovarian vein embolization in this patient group.

The final talk was given by Dr. Peter Gloviczki. He spoke about the "Role of Renal Vein Compression (RVC) in Pelvic Venous Disorders (PeVD)." Dr. Gloviczki started off by mentioning that the younger patients typically have symptoms which we associate with RVC, left flank pain, hematuria and left gonadal vein reflux. In younger to middle aged women the symptoms resembled those of PeVD. He also mentioned that we have several tools to measure the hemodynamic and anatomic aspect of RVC, namely the aorta to SMA angle, measurement of pressure gradient across the nutcracker anatomy (we are close to a consensus on a three mm Hg and higher gradient as being abnormal). He also mentioned duplex criteria with a left renal vein diameter ratio of > 5.0 and peak "systolic" ratio of around 6.1 as suggesting hemodynamic significance.

It is not clear how many patients with pelvic venous disorder have a component of RVC and vice versa. Traditionally, RVC has been treated surgically but more recently there have been publications on treatment of RVC using endovascular stents, often in combination with ovarian vein sclerotherapy and embolization. It is difficult to draw conclusions from the current literature on how effective renal vein stent placement is. Severe complications such as stent embolization have

Message from the Editor – Hell 2 The Eye of the Storm 3
The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AVF Gala Dinner 18
AVF Member Community 21





VILLAVICENCIO SYMPOSIUM: ADVANCES IN PELVIC VENOUS DISEASE (PEVD)

Haraldur Bjarnason, MD

been reported from this procedure. Dr. Gloviczki stated that RVC is a contributor to PeVD when present and that open surgery was the "gold standard" when needed. He also stated that ovarian vein sclerotherapy with embolization should be the first approach and that open surgery would only be needed in approximately 5% of cases in combination with sclerotherapy with embolization. He also warned that if renal vein stent placement is a consideration, the patient should be warned and carefully consulted on potential complications and limitations of the procedure.

4:30 pm – 6:00 pm	VILLAVICENCIO SYMPOSIUM: ADVANCES IN PELVIC VENOUS DISEASE (PEVD) Moderator: Antonios Gasparis
4:30 pm	Pelvic Venous Anatomy and Pathology Neil Khilnani
4:38 pm	Classification of Pelvic Venous Disorders Mark Meissner
4:46 pm	Protocol in Ultrasound Imaging of the Pelvic Veins Nicos Labropoulos
4:54 pm	Do You Need Axial Imaging? When and Why? Ronald Winokur
5:02 pm	Treatment Algorithm and Technical Steps in Pelvic Reflux Antonios Gasparis
5:10 pm	NIVL in the Setting of PCS: Should I Stent and When? Kush Desai
5:18 pm	Role of Renal Vein Compression in PeVD Peter Gloviczki
5:24 pm	Clinical Cases in PeVD and Interactive Discussion (All Faculty)



- INSIDE THIS EDITION Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch 4 VENOUS2020, the 32nd Annual Meeting of the American Venous Forum 6 Highlights from Day of Science 8

- Forum 6 Highlights from Day of Science 8 Villavicencio Symposium: Advances In Pelvic Venous Disease (PEVD) 10 Top Abstracts and Late Breaking Trials A Closer Look 14 Highlights from the International



JOBST[®] Casual Pattern Casual Medical Compression Socks



TOP ABSTRACTS AND LATE BREAKING TRIALS – A CLOSER LOOK

Edgar Guzman, MD

Compression Following Endothermal Ablation - A Randomized Controlled Trial Roshan Bootun

The COMETA trial set out to determine the effect of thigh high graded compression (30-40 mmHq) during days two to eight following endothermal venous ablation with concurrent phlebectomy as needed (52% of cases). 206 patients were randomized. All received 24 hours of elastic bandaging. It was shown that post procedural pain was decreased during days two to five in the compression group, with the effect being greatest when concurrent phlebectomies were performed (Figure 3 copied below).¹ There were no differences in bruising, rates of venous occlusion or time to return to work. At the six month follow up, both groups had comparable improvements in venous clinical severity scores and quality of life measures.

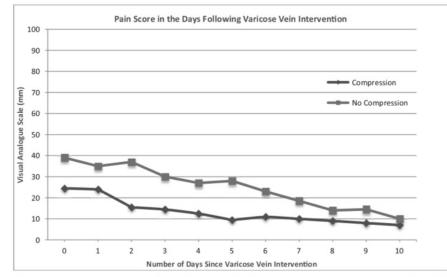


FIGURE 3. Median pain score using a visual analog scale (VAS) in the first 10 days post-intervention. Significantly lower VAS scores were recorded on days 2-5 in the compression group.

The instrument used to assess pain was a 100mm visual analog scale. The median pain level for the compression group was 15.5mm, compared to 37mm for the compression group. Unfortunately, use of analgesia or extent of phlebectomies were not recorded and may have confounded the results. Loss to follow up was 36% at two weeks and 66% at two months.

Given that technical success rates were comparable, and the study was not powered to evaluate the effect of prolonged compression on DVT prevention, I believe the findings indicate stockings can be considered as a useful adjunct in symptom management following endothermal ablation.

- Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President,
- Harold "Hal" J. W VENOUS2020, the 32nd Ar Meeting of the American Ve

 - Villavicencio Symposium Advances In Pelvic Venou

 - - AVF Gala Dinne



TOP ABSTRACTS AND LATE BREAKING TRIALS – A CLOSER LOOK continued

Edgar Guzman, MD

Update on Penumbra's Indigo Catheter for Pulmonary Emboli Brian Kuhn

While not yet published, the EXTRACT-PE trial has completed enrollment and data collection. This was an open label, single arm trial to evaluate the effect of percutaneous pulmonary thrombectomy using the Penumbra's Indigo system with a CAT8/SEP8 catheters and separators.

119 patients with acute PE, with an SBP>90% and an RV/LV ratio of >0.9 were enrolled. Patients needing a FiO2 greater than 40% to maintain a saturation of 90% were excluded. Primary endpoints were reduction in the RV/LV within 48 hours, device related adverse events and major bleeding. All-cause mortality, symptomatic PE recurrence and device related adverse events were followed to 30 days.²

The authors reported high technical success rates with procedural times of approximately one hour. No bleeding events occurred, and no blood transfusions were necessary. There was an average 27% reduction in the RV/LV ratio with three adverse events and one death. TPA was used in 1.7% of cases and average ICU stay was one day. An on-table reduction in PA pressure from 49 to 44.5 mmHg was recorded.

This study showed efficacy and safety of the Penumbra Indigo thrombus aspiration system, which is now FDA approved for the treatment of pulmonary embolism. However, it did not explore if the favorable hemodynamic changes seen peri procedurally translate into a better long-term outcome for this patient population.

References

- 1. Bootun R, Belrammam A, Bolton-Saghdaoui L, Lane T, Riga C, Davies A. Randomized controlled trial of compression after endovenous thermal ablation of varicose veins (COMETA Trial). Ann Surg 2019; 2019 Dec 16. doi: 10.1097/SLA.000000000003626.
- 2. Penumbra Inc. Evaluating the Safety and Efficacy of the Indigo Aspiration System in Acute Pulmonary Embolism (EXTRACT-PE). ClinicalTrials.gov, Feb 2020. https://clinicaltrials.gov/ct2/show/study/NCT03218566

- Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch 4 VENOUS2020, the 32nd Annual Meeting of the American Venous

- Disease (PEVD) 10 Top Abstracts and Late Breaking Trials A Closer Look 14 Highlights from the International
 - - Session 16 AVF Gala Dinner 18





Maxim E. Shaydakov, MD, PhD

INSIDE THIS EDITION

Message from the Editor – Hell 2
The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AVF Gala Dinner 18
AVF Member Community 21

HIGHLIGHTS FROM THE INTERNATIONAL SESSION

Maxim E. Shaydakov, MD, PhD

Dear colleagues,

The scientific program of the American Venous Forum's (AVF) 32nd Annual Meeting, VENOUS2020, was rich in novel research projects. Many participants could not attend all sessions due to the tight schedule. We also have to keep in mind our colleagues from the US and overseas who could not attend the Annual Meeting this year. In this issue we would like to bring your attention to some studies that may deserve further thought and discussion.

Chronic venous insufficiency due to deep valvular reflux is one of the most challenging forms of chronic venous disease. Even an adequate compression therapy may not be enough to control symptoms, not to mention compliance issue and other limitations. Pioneers of deep venous valve reconstructive surgery demonstrated good long-term hemodynamic results and significant clinical improvement after suture valvuloplasty and valve replacement procedures a quarter century ago.^{1,2,3} However, these operations are technically demanding and currently not available to the majority of patients due to lack of experience and high-level evidence on their efficacy. A multicenter prospective nonrandomized study (NCT03216005) presented by Ramon L. Varcoe at the International Session aims to address deep vein insufficiency by endovascular approach.⁴ The authors employ the BlueLeaf system (InterVene, Inc.; San Francisco, CA) to create monocuspid neovalves in the femoropopliteal venous segment in patients with CEAP C4-C6 disease. The concept of the procedure is similar to open monocuspid neovalve formation from the intima of the vein wall elegantly described by Maleti and Lugli.⁵ Significant and sustained symptomatic improvement in the majority of patients in 12 months after the procedure was reported. The main take home message is that endovascular neovalve creation is technically feasible with low immediate morbidity.

The scientific novelty and potential clinical advantages of the study are clear, and we would like to congratulate the authors with this promising and timely report. We also would like to mention a number of limitations. First, symptomatic improvement is one of the main endpoints of this feasibility study. It is possible that resolution of symptoms is related to a higher compliance to compression therapy and more effective follow-up in these patients. Further research with an appropriate non-operative control group is warranted to clarify clinical benefits of this innovative treatment approach. Second, it is important to accurately evaluate long-term hemodynamic function of neovalves by image studies. Biomechanics and durability of a monocuspid valve in the deep venous system have to be carefully investigated. From this standpoint, advancing this novel endovascular technology to a hypothetical device for a more natural bicuspid neovalve creation may be an interesting avenue for further research. Third, patients with



HIGHLIGHTS FROM THE INTERNATIONAL SESSION continued

Maxim E. Shaydakov, MD, PhD

primary valvular reflux and postthrombotic reflux may need a different treatment approach. In theory, while postthrombotic vein with destructed valves may be a good candidate for neovalve formation, valvuloplasty may be a better option for patients with preserved valvular leaflets. Finally, despite no cases of deep vein thrombosis (DVT) were observed, the incidence of DVT in long-term is still unclear. We encourage the authors to continue this challenging research endeavor.

Stay safe.

References:

1. Kistner RL, Eklof B, Masuda EM. Deep venous valve reconstruction. Cardiovascular Surgery 1995;3(2):129-40.

2. Raju S. Venous insufficiency of the lower limb and stasis ulceration. Changing concepts and management. Ann Surg 1983; 197(6):688-97.

3. Taheri SA, Lazar L, Elias S. Status of vein valve transplant after 122 months. Arch Surg. 1982;117:1313-1317.

4. Vasudevan T, Hill A, Gagnon J. et al. Twelve-Month Results of a Clinical Feasibility Study for Endovenous Valve Formation to Treat Deep Vein Reflux. JVS-VL 2020; 8(2):314-15. 5. Maleti O, Lugli M. Neovalve construction in postthrombotic syndrome. J Vasc Surg 2006; 43(4):794-9.

The AVF Membership Committee introduces a new members benefit to support the professional development of Early Career AVF members.



Why Become a Mentor/Mentee?

- Improve your leadership
- Motivate your peers
- Share knowledge
- Develop your reputation
- Create a vision
- Collaborate on research
- Develop your network

Are you interested in becoming a mentor/mentee?

Yes, Include Me!

- Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch 4 VENOUS2020, the 32nd Annual Meeting of the American Venous Disease (PEVD) 10 Top Abstracts and Late Breaking Trials – A Closer Look 14 Highlights from the International Session AVF Gala Dinner





Jeff Mendola

AVF GALA DINNER

Jeff Mendola

It was Thursday, March 5, and the sun was setting on another day of the AVF Annual Meeting, VENOUS2020, in Amelia Island, Florida. More than 150 venous colleagues, friends and spouses gathered in the Amelia Ballroom for an evening of celebration. Clinking wine glasses and smiles filled the room as long-time friendships were renewed and new ones begun.



Our emcee, Dr. Daniel Monahan, kicked off the program by introducing Gala Co-Chairs Drs. Elna Masuda and Joann Lohr who welcomed the capacity crowd. AVF President Dr. Brajesh Lal announced this year's award winners. The Best Abstract Award went to Dr. Jorge Ulloa and the Best Poster Award went to Dr. Alan Dietzek and Dr. Stephanie Stroever. The v-WIN Foundation Best International Presentation prize was presented to Rachel Morris. Dr. Lal also recognized this year's Eugene Strandness Speaker Dr. Andrew Nicolaides. Eric Cohen from Essity then presented the 2020 AVF-JOBST Research Grant recipient Dr. Eri Fukaya from Stanford. Dr. Monahan wrapped up the program by announcing the winners of the 2020 Golf Outing. Lowest net went to Jim Mohr, Longest Drive to Dr. Matt Recht and Closest-to-the-Pin was Dr. Hal Welch.

INSIDE THIS EDITION

Message from the Editor – Hell 2
The Eye of the Storm 3
Get to Know our Newly
Appointed President,
Harold "Hal" J. Welch 4
VENOUS2020, the 32nd Annual
Meeting of the American Venous
Forum 6
Highlights from Day of Science 8
Villavicencio Symposium:
Advances In Pelvic Venous
Disease (PEVD) 10
Top Abstracts and Late Breaking
Trials – A Closer Look 14
Highlights from the International
Session 16
AV/E Cala Dinner 19

VE Momber Community 21



AVF GALA DINNER continued

Jeff Mendola



With the formal program complete, it was time for our featured entertainment to take the stage.

Dr. Monahan introduced the AVF's Director of Mission Advancement, Jeff Mendola, who shared the "voices" in his head. Guests laughed as Marvin Martian, Elmer Fudd, Kermit the Frog, Dr. Bunsen Honeydew & Beaker from Muppet Labs and "The Count" joined us. As Jeff's finale, Ernie from Sesame Street sang his "Rubber Duckie" song.

Next up, crowd favorite Dr. Bo Ekloff sang one of his favorite Bob Dylan songs - complete with his own, unique venous lyrics that earned a score of 10+ from our judges Drs. Lal, Masuda and Lohr.

In keeping with the musical theme, our duo of quitar-wielding doctors plugged into the band's amplifiers and donned their signature shades. Rob McLafferty introduced and performed two of his own, original songs that he had composed many years ago. Dr. Bill Marston accompanied him as if they'd been playing together for years and thrilled the audience with a pair of impressive guitar solos. Unfortunately, rumors of a nationwide tour are not true.







- Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch 4 VENOUS2020, the 32nd Annual Meeting of the American Venous Disease (PEVD) 10 Top Abstracts and Late Breaking Trials – A Closer Look 14 Highlights from the International
 - Session 16 AVF Gala Dinner 18



AVF GALA DINNER continued

Jeff Mendola

World-renowned magician, Dr. Peter Gloviczki, capped off our entertainment with a slew of amazing magic tricks. Coins disappeared and then reappeared. Out came a deck of cards and the crowd was amazed as a card signed by Dr. Tony Gasparis was pulled out of a wallet on the other side of the room! There were ropes with rings and knots - and then no rings and knots - oh wait, now they're back. One minute, these long white ropes went through both sleeves of a buttoned suitcoat - and the next second, Dr. Gloviczki was holding the jacket in his hand. Amazing!



Dr. Monahan thanked everyone for coming, cleared the dance floor and welcomed our band, The Mix, back to the stage for music and dancing. And dance they did!



- INSIDE THIS EDITION Message from the Editor Hell 2 The Eye of the Storm 3 Get to Know our Newly Appointed President, Harold "Hal" J. Welch 4 VENOUS2020, the 32nd Annual Meeting of the American Venous Forum 6 Highlights from Day of Science 8







Introducing Find a Vein Specialist Caitlin Barry caitlin@veritasmeetingsolutions.com

It shouldn't be about what you can do for us, but what can AVF do for you! We want to thank you for your continued support the last 12 months and in the future! I personally have been in touch with many of you regarding your AVF Membership, helping you sign up for the annual meeting and sending out receipts, but I rarely receive requests about our Vein Specialist Directory. In some ways, it is our hidden Membership Benefit, that I would love to share with you all.



Our Vein Specialist Directory is an added benefit for AVF Members – it is an inclusive service for you! The directory is an online referral resource for patients and for referring physicians.

It is as easy as 1, 2, 3!

All you need to do is fill out the online form that includes your first and last name, organization, and contact information. You never know who is looking for a specialist whether it is a future patient or a physician looking for a referral. We want you all to have as many opportunities to learn, be educated, and gain opportunities from our Membership and our support.

We hope during this trying time that we can be a resource for you! Let us know what you need from us. Remember we are all in this together!

Get Listed in the AVF Find a Vein Specialist **Directory!**









New AVF Members - Welcome to the community!

- Mr. Shahnur Ahmed Dr. Ramsey Al-Hakim Dr. Tom Alsaigh Mr. Mark Awad Ms. Schuyler Barraclough Dr. Riyaz Bashir Dr. Teodora Bochnakova Dr. Javier Bravo Dr. Juan Cifuentes Dr. Juan Glister Dr. Anthony Grieff
- Dr. Todd Hansen Mr. Amrit Hingorani Mr. Jordan Iceton Dr. Farouc Jaffer Dr. Elston Johnson Dr. Andrei Kindzelski Dr. Alexander Lam Dr. Angela Lee Dr. Maria Victoria Loson Ms. Madison Miller Dr. Abduraheem Mohamed
- Dr. Andrew Nicolaides Dr. Hunter Ray Dr. Fanny Rodriguez-Santos Dr. Charles Serhan Dr. Pratiksha Shah Dr. Akash Sharma Dr. Christine Shokradeh Dr. John Taggert Dr. Daniel Tarver

Join AVF Today veinforum.org | 847.752.5355



Membership Benefits Include:

- Publications and News
- Comprehensive Venous and Lymphatic Education
- Venous Research Opportunities
- Career and Practice Growth
- Opportunity to Become a Leader in Venous Disease
- Make a Difference in Venous and Lymphatic Health

LEADING VENOUS HEALTH THROUGH EDUCATION Collaborating for Better Patient Care





VEIN SPECIALIST PUBLICATION

EDITOR-IN-CHIEF: Steve Elias, MD **EXECUTIVE EDITOR:** John Forbes, MBA **PUBLICATION EDITOR:** Stacey Meyer, MBA

EDITORIAL BOARD:

Windsor Ting, MD Haraldur Bjarnason, MD Edgar Guzman, MD Andrea Obi, MD Alessandra Puggioni, MD Maxim Shaydakov, MD Eric Hager, MD Anil Hingorani, MD

Want to receive monthly updates?

Contact us 847-752-5355 or info@avfmail.org

VEIN SPECIALIST welcomes your thoughts and comments. Please send all comments to info@avfmail.org.

*Disclaimer: The information featured in this newsletter selected by AVF, which offers educational materials, are not intended to be representative of patients with venous disease generally and should not be considered medical advice. Patients should consult their doctor to determine the best treatment decision for their individual disease.

Interested in becoming a part of the **AVF COMMUNITY?**



- Message from the Editor Hell The Eye of the Storm Get to Know our Newly Appointed President, Harold "Hal" J. Welch VENOUS2020, the 32nd Annual Meeting of the American Venous

- - AVF Gala Dinner