

## VENAPULSE USERS SHARE INSIGHTS

### *Considering Hands-Free vs. Manual Venous Reflux Exams?*

By Sherry A. Boyd, Managing Editor,  
*Aesthetics News Today*

The portable VenaPulse® augmentation device offers a hands-free alternative to manual compression that has been adopted by leading medical facilities seeking to improve both efficiency and accuracy of lower-extremity venous reflux exams. It has proven to be an efficient alternative to manual compression of leg veins and it comes with specialized cuffs that yield predictable results. The VenaPulse rapidly inflates and deflates tourniquet pressures with a foot switch and is portable and easily maneuverable. In use, the time savings and ease of operation deliver measurable improvements. The advantages that the VenaPulse provides for both patients and technicians have been reported to *Aesthetics News Today* by a health system radiology department and a leading hospital vascular lab where the VenaPulse is in regular use.

#### A RADIOLOGY DEPARTMENT REPORTS

“We purchased four units, one for each of our hospitals. We use the VenaPulse units when doing venous insufficiency cases,” says Bob Kunzer, CRA, RT (R), Senior Manager, Radiology, Glenbrook Hospital, NorthShore University Health System, Evanston, Ill. “All the technologists love it because it makes their jobs easier and reduces exam time while all of our vascular surgeons have commented on the quality of the exams.”

He discussed the improvements made with the VenaPulse systems, “We are now saving on average 30 minutes per exam and have changed our scheduling grid to reflect the shorter time needed to perform the exam. We no longer need a second technologist to compress the leg. Once again freeing up more time slots.” Bob Kunzer added, “Repeat patients have commented that it is more comfortable using the VenaPulse than manual compression.”

In addition to the faster exam times, Bob summarized how the VenaPulse benefits NorthShore University HealthSystem this way, “Vascular surgeons love the reproducibility of each exam and know that they are getting an accurate reading from exam to exam. It reduces operator error.”

#### A HOSPITAL VASCULAR LAB REPORTS

“Our vascular lab uses the VenaPulse to evaluate for incompetent valves causing venous insufficiency in the lower extremity. The VenaPulse is a revolutionary addition in our lab to test for valvular reflux with automated distal augmentations in the venous system,” says Dianne Masri, BS, MA,

RDMS, RVT, Supervisor & Technical Director, Vascular Lab, Hoag Memorial Hospital, Newport Beach, Calif. “It is a light-weight and portable unit with a remote control foot switch that inflates the attached pneumatic cuff. The cuff is inflated to perform an automatic compression, which serves as a distal augmentation for the vein or perforator being evaluated.”

Hoag’s vascular lab has seen specific improvements with the VenaPulse. Dianne says, “for the patient, the exam is performed in a shorter time duration with increased accuracy for optimal results. The technologist shares the same rewards as the patient, as well as resists fatigue and awkwardness during this taxing exam. The foot switch allows the technologist to inflate the cuff using the same pressure the entire limb while keeping a steady hand on the vein being investigated. By this maneuver, the technologist is able to keep control of the transducer and the functions on the ultrasound machine at the same time.” Dianne summarized, “The benefits of the VenaPulse are nothing less than improved productivity, efficiency and accuracy including improved body ergonomics.”

#### IN CONCLUSION

Work activities known to cause musculoskeletal disorder MSD in sonographers include forceful exertions or strain when compressing



*Two cuffs come standard with self-contained VenaPulse device. The patented foot cuff (left) allows documentation of valves in the lower limb while the blue wrap (right) allows documentation throughout the whole limb.*

leg veins, awkward postures or unnatural positions, commonly from reaching over patients during exams and repetitive motions. Work-related musculoskeletal disorder (or MSD) is the number one cause of long-term absence in healthcare workers. In a recent survey\*, 84% of diagnostic medical sonographers suffer from some sort of injury that is costly for both the employer and the employee

The lower-extremity venous reflux exam was once considered one of the most dreaded tasks in a typical vascular lab. Before the availability of a suitable medical device the exam formerly involved

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— *Dianne Masri, vascular lab supervisor and technical director.*

awkward contortions, uncomfortable bending and twisting and tiring exertions that too often led to hand strain. To avoid these problems technicians frequently enlisting a helping hand from a colleague, but that doubled the workforce time to complete the exam. The improved ergonomics with the VenaPulse offer a winning combination for the patient, the medical technician and the facility.

Indications for use of the VenaPulse include distal and proximal augmentations, locating suitable distal vessels for bypass, quantification of venous flow, vein mapping and reflux measurements of specific venous valves. Independent tests have been conducted to compare the pneumatic cuff to manual compression and practical uses in clinical settings have been followed. 📄

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#### **About ACI Medical**

*ACI Medical, LLC is a biomedical engineering firm engaged in the research, development, manufacture and sale of therapeutic products and technologies for individuals with varying degrees of limb- and life-threatening vascular conditions. With almost 30 years of experience in bringing innovative healthcare products to market, ACI Medical is committed to developing, producing and distributing the highest-quality products for patients, consumers and healthcare partners. VenaPulse is a registered trademark of ACI Medical LLC.*

\*“Sonographer Occupational Musculoskeletal Disorders: What Are They And How Can They Be Prevented,” Sound Ergonomics, LLC and Biodex Medical Systems, Inc.

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