

Real-world Evidence for VASCADE MVP

About the EP Program

- Valley Hospital—450 bed hospital in Ridgewood, New Jersey
- 3 EP Labs and 3 Cardiac Catheterization Labs
- 5 EPs who perform ablations
- Around 500+ ablations per year
- Same Day Medicine
 - Patients check in and also start recovery (typical case) here
 - Location of pre-procedure huddle with patient and care team (EP, nurses, techs)
- As of 2015, regional cardiovascular affiliate with Cleveland Clinic
- Harm Reduction Organization (HRO)—Hospital-wide emphasis on patient safety



Left to right: Advay Bhatt, MD; Dan Musat, MD; Suneet Mittal, MD; Mark Preminger, MD; and Tina Sichrovsky, MD.

Discussion with Dr. Mittal

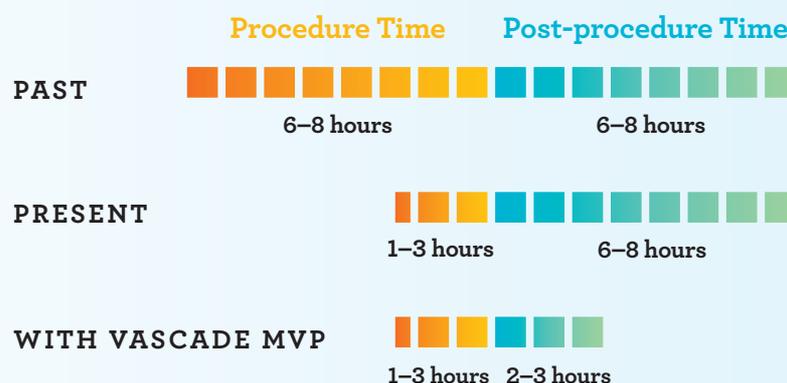
Q: What is your impression of VASCADE MVP and the associated changes in post-procedure protocols?

A: When we think about procedural protocols in electrophysiology, historically all of the focus has been on the procedure time itself. Historically, procedure times were very long, up to 6–8 hours. Fortunately with expertise and newer technologies, we have reduced procedure times anywhere from 1–3 hours. What has not changed in the 20 years I have done electrophysiology, is what happens post-procedure. The ultimate limiting step in the post-procedure process was hemostasis. Therefore, we were not able to get a patient up and moving because of fear that they would bleed from the access sites. This became an even bigger concern in recent years when we learned that procedures are safer to do when patients are fully anti-coagulated.

VASCADE MVP vascular closure system will allow us for the first time to dramatically shorten the post-procedure workflow for patients. The net result is that the total procedure time has been cut almost to a third of historical norms. Importantly, this change has paved the way for same-day discharge for AF ablation patients and we are currently able to discharge many of our AF ablation patients same-day.

Q: What do you think about VASCADE MVP in light of COVID 19?

A: With COVID 19, VASCADE MVP is even more important; patients are very concerned about the amount of time they have to spend in the hospital and VASCADE MVP helps us get them home more quickly.



Q: How has VASCADE MVP affected the use of post-procedure opioids?

A: One benefit that we saw during the AMBULATE trial was the reduction in the need for post-procedure opioids to help with pain control. With the national epidemic of the opioid crisis, we in the medical community have learned that even a single dose of opioid prescription can be associated with an addiction potential.

Our ability to eliminate the prolonged bedrest has also meant that we do not have to give patients opioids. Simple acetaminophen and early ambulation can decrease the back pain that often led to the need for opioid administration. We have seen in our own experience a nearly 50% reduction in the likelihood that we would have to give patients opioids for pain control since we have introduced VASCADE MVP in the lab.

Q: What has the reaction been from patients?

A: When we think about patient reaction, the best patient is the patient who has had an ablation with standard manual compression before and now has the opportunity to undergo a procedure where early ambulation is possible. That is the patient who can see for themselves what a dramatic change this is for them and they are the happiest patients we have.

All patients, given the opportunity to ambulate early are very, very pleased. It changes things for people—just the small psychological aspect of not having to use a urinal lying down—being able to get up and go to the restroom—it makes people feel more normal and less sick. I think that all helps in their ultimate recovery.

Q: What was it like to learn how to use VASCADE MVP?

A: Vascular closure has been around for some time for arteries and there are many systems out there. Over the years, I have asked my interventional colleagues to teach me these systems. Honestly, they were not very user friendly. They were something that I would use once or twice, but never developed a level of comfort. When I was initially approached with VASCADE MVP, I had the same reservations. Would I be able to find a system that was easy to use and practical to use given the fact that I would be using it in 3–4 access sites per patient. The VASCADE MVP was designed for the electrophysiologist to address what we deal with—multiple sheaths, larger bore sheaths and a simple design. The learning curve was very short, and the opportunities to make mistakes are very limited. The end result is a perfect closure in the vast majority of patients.

Q: How do you think about VASCADE MVP relative to other new technologies?

A: One of the most exciting things about the VASCADE MVP venous closure system is that when we look at the number of people involved in doing a complex ablation, there are actually benefits to all stakeholders.

Stakeholders	VASCADE MVP Benefits
Patient	▪ Being able to get a patient ambulating within 2 hours, dramatically reducing the need for opioids, and making their total experience more comfortable is a huge benefit in itself.
Physician	▪ There are also benefits for the physician—less downtime in the lab which means our day is more efficient.
Staff	▪ There is less downtime and more rapid turnover. More importantly, they are doing nursing and more complex things—not just holding pressure to stop bleeding.
Anesthesiologist	▪ Time is valuable. We don't want to waste an anesthesiologist time waiting for labs to be turned over.
Healthcare System	▪ We can finally start to think about same-day discharges for patients and improve the economics to the health care system.

The fact that there are many stakeholders, all benefiting, starting with the patient, really separates VASCADE MVP from other new technologies.

AF Ablation Post-Procedure Workflow



Faster turnover, more efficient, not as much lab downtime



No longer have to hold groin for many minutes



No longer have to lay flat for 6 hours

Vascular closure is an ultimate game-changer for electrophysiology. It is going to change forever the way we manage patients post procedure. Increasing satisfaction to patients, physicians and lab staff and those are things that are rarely possible in Electrophysiology.



Dr. Mittal is not financially compensated by Cardiva Medical for this publication, and the content is an accurate presentation of his personal opinion of the VASCADE MVP device. Refer to the product IFU before use for important safety information.