Hello, and welcome to the January 2020 edition of *Vascular Disease Management*. I have chosen to start this new year with editorial comments on an article by Raymond Datillo, MD, “How to Prepare For, and Treat Potential Complications in the Outpatient Endovascular Center.”

I have chosen to comment on this article because I think that it is a “must read” for anyone who may be contemplating performing interventions in an outpatient endovascular center. In this article, Dr Datillo carefully discusses his strategies to avoid outpatient complications and the techniques that he utilizes to treat complications that occur during procedures. He discusses patient selection, procedural planning, the need for devices that can be utilized to treat major complications, and algorithms for patient transfer in the very rare circumstances in which complications are not able to be treated within the office-based lab (OBL). The article by Dr Datillo reflects insight that he has gained from extensive experience.

There is a growing trend towards physicians performing more endovascular interventions in OBLs and ambulatory surgical centers. This trend has been driven by many factors, including patient convenience, decreased patient costs, and improved elective scheduling, with no emergency cases. Other factors driving the trend are improved quality of life of the staff (as there is no emergency call), greater physician autonomy, a more favorable physician experience, and favorable provider finances. Post-treatment surveys of patients typically report higher patient satisfaction scores in patients treated in OBLs and ambulatory surgery centers. Outpatient therapy is associated with less risk of nosocomial infections. Ultimately, moving interventions out of the hospital and into outpatient settings has the potential to significantly decrease overall costs, as hospital admissions are perhaps the greatest driver of increased costs.

Dr Datillo clearly presents the need to avoid complications in cases performed in outpatient labs. I completely agree with his assessment. I would like to add that I think that outpatient centers should be equipped to perform cases utilizing CO₂ to lessen risk of acute kidney injury. Outpatient centers should have the best imaging equipment available in order to lessen risk of inadvertent vascular injury, and to ensure proper delineation of anatomy. There is no room for error in outpatient centers. Measurement of activated clotting times to ensure appropriate anticoagulation is a requirement. As pointed out by Dr Datillo, timely management of access site complications is paramount. Ultrasound-guided access with micropuncture devices is crucial to preventing access site bleeding, as no closure tool can seal posterior arterial wall punctures, and closure tools may be inappropriate in certain cases. Liberal utilization of closure tools in appropriate cases can diminish the risk of bleeding, but closure tools are associated with risks and costs as well. Unfortunately, we do not have a vascular closure tool that is universally successful and is associated with no complications. I think that the growing trend towards radial and pedal access can further reduce bleeding risk in patients undergoing outpatient interventions, but radial and pedal access must be weighed against the potential occlusive risk in small arteries where a sheath may be occlusive, or may actually result in direct arterial injury.

I believe that the decreased complication rates reported by outpatient centers as compared to hospital-based procedures are driven by giving the appropriate attention to avoiding access site and treatment complications. I have noted that experienced interventionists who work in outpatient centers tend to have fewer vascular bleeding complications with hospital-based procedures, which is probably related to the strict attention given to avoidance of bleeding complications.

The trend towards more interventions being performed in outpatient centers will continue. It will be driven by payers and providers, though there will remain a need for hospital-based procedures in higher risk cases. Perhaps some of the lessons learned in outpatient centers where there is less back-up support will improve hospital procedural outcomes as well.