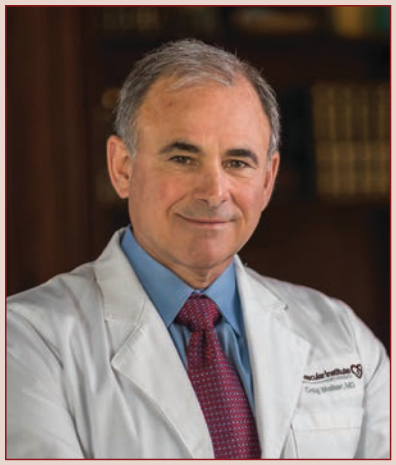
The Role of Office-Based Interventional Suites in Healthcare During the Second Wave of the COVID-19 Pandemic



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Hello and welcome to the September 2021 edition of *Vascular Disease Management*. Although there are several articles worthy of commentary in this issue, I have decided to comment on the role of office-based interventional suites in overall healthcare during the second wave of the COVID-19 pandemic. I have chosen to approach this subject as there has been great controversy and overt criticism directed toward the growing trend of outpatient lab-based treatment of cardiovascular disorders.

Over the past decade, there has been substantial proliferation of office-based labs (OBLs) and ambulatory surgical centers (ASCs). Some of these centers are privately owned, some are owned in partnership with hospitals, and others are owned by corporations where physicians can lease time.

Office-based centers vary greatly in the sophistication of equipment and employees. This should surprise no one, as there are great differences between individual hospitals. While some outpatient settings have only basic equipment, others have equipment and staff that are substantially better than most hospitals. Procedures performed in an office-based setting are far less expensive than the same procedures performed in a hospital, and typically patients report an overall more favorable experience. Procedures that require at least overnight observation, such as carotid artery stenting or thrombolysis, cannot be performed in outpatient interventional centers. Many providers suggest that office-based interventional centers may be part of the solution in lowering overall healthcare costs that have, in large part, been driven by escalating costs of care within hospitals over the past few decades. Providers within office-based systems have greater autonomy in directing the makeup of the technicians and nurses with whom they will work. Interventionists can implement routine utilization of other healthcare experts. Ultrasound technicians can assist in gaining access, crossing total occlusions, and managing access-related complications. Anesthetists can limit patient discomfort associated with invasive procedures. Interventionists can choose their favored devices. Providers report a work experience that is far more favorable in the outpatient setting. This has been instrumental in delaying retirement at this time of physician shortage, particularly in underserved areas.

Pundits argue that procedures performed in outpatient settings may be "less appropriate." Critics cite as evidence that more atherectomy procedures are performed as a percentage of cases, inferring that utilization of these FDA-approved procedures is inappropriate. While it is true that there is a lack of randomized, controlled, level-one data demonstrating benefit with atherectomy other than with a 308 nm excimer laser for treating in-stent restenotic lesions (ISR), most interventionists believe that atherectomy devices may limit the likelihood of dissection in calcified lesions or improve vessel preparation, resulting in better outcomes where stent implantation is required. The critics of atherectomy do not mention the underutilization of a 308 nm excimer laser

in treating ISR in most hospitals. The most utilized treatment in hospitals is a simple balloon angioplasty, which has been shown to be inferior to treatment with a 308 nm laser, drug-coated balloon, or covered stent.

Many would suggest that the recent proliferation of OBLs and ASCs is purely profit-driven. These same critics, however, fail to acknowledge that hospitals have become progressively profit-driven and are far more expensive than outpatient centers. The hospital lobby is one of the strongest lobbies in the United States. Many hospitals have failed to fully address issues of capacity, resulting in significant patient and provider inconvenience.

There is no organized criticism that invasive bypass surgical procedures performed on stenotic lesions in hospitals may be inappropriate. Open surgical procedures pose a greater risk of morbidity (such as wound infection) and mortality than interventional procedures in the treatment of stenotic lesions with little associated patency benefit. Other critics of office-based intervention argue that there are cases performed that may lack appropriate indications as there is less peer review. No one should ever endorse inappropriate cases in any setting. Inappropriate cases occur not secondary to the site of care, but rather to the knowledge and ethics of a provider. Inappropriate cases occur within hospitals as well. Cases should require appropriate indications and should be performed for patient benefit. Physicians may differ in opinion on what constitutes patient benefit; some would argue that claudication is never an indication for any form of treatment, while others would argue that treatment improves quality of life and is therefore justified. Many would argue that the indications for surgery and intervention may also be different secondary to different risks of morbidity and mortality.

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While I understand the concerns creating the arguments that are continuing to evolve, one point has recently become quite clear to me: Hospitals are allowing only emergent procedures secondary to bed shortages associated with COVID-19 admissions, and patients are wary of being hospitalized secondary to risk of infection exposure. Patients are delaying vital care because of the fear of infection or lack of access. Outpatient interventional care poses far less risk of exposure to infection, and there is no decrease in the capacity to address treating those patients who may benefit from care where delays may be harmful.

We are all hopeful that we will one day get beyond this present COVID-19 crisis, but we must realize that there will be additional challenges in the future. I believe that the present capacity created by outpatient centers may be lifesaving and cost-saving. I suspect that hospitals will rapidly evolve to participate in jointly owned OBL/ASC centers as a means of addressing capacity, cost, risk of infection, and physician retention. Changes in healthcare paradigms are typically met initially with great criticism and resistance, but ultimately beneficial changes will prevail.