

## ROUNDTABLE DISCUSSION

# Office-Based Vascular Practices During the COVID-19 Pandemic

A discussion about how COVID-19 has affected the office-based practice, including procedure volume shifts, protocol changes and safety procedures, hospital referrals, and follow-up scheduling.

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## Overall, how has the pandemic impacted your office-based practice?

**Dr. Fisher:** Certainly, I think the impact for the office-based lab (OBL) has been smaller than at the hospital because the OBL is an environment that you can control a lot easier. We can screen patients better and set up our own stringent protocols, whereas in the hospital environment, you are really at the mercy of the hospital and the hospital system to keep patients safe.

**Dr. Garcia:** The pandemic has definitely had an impact on the practice. Initially, because we rescheduled nonurgent, nonemergent cases, we saw a dip not only in the number of cases we performed in the OBL but also in the number of patients seen during normal office hours. For the months of April and May, we were down 60%. The big issue now is having the lack of resources to handle the combination of normally scheduled patients, those that need to be rescheduled, and the urgent/emergent cases

on top of the normal elective procedures. June was the busiest month since starting the new practice in 2017.

**Dr. Khatib:** Like all businesses, we have seen a decline in cases partly due to executive orders early on and then patient fear later. Yet, the pandemic has further distinguished our hospital independence, a trait that is favored more by patients now.

**Dr. Noor:** The pandemic affected us starting the week of March 9 when New York State went on pause. The OBL saw an initial increase in cases as we tried to get urgent cases done as quickly as possible not knowing if we would shut down, and our patients were extremely anxious to go to the hospital in the midst of a pandemic. Any cases that could safely be done in the OBL continued to be done during the pandemic, but these were only emergent or urgent cases that could not be postponed for 6 to 12 weeks.

We quickly adopted all Department of Health and Centers for Disease Control and Prevention (CDC) guidelines at the OBL to ensure the health of our doctors, employees, and our patients who came to the OBL. The patients felt safe to have procedures done in the last few months. In fact, they prefer the OBL to the hospital even now. We also pivoted quickly and partnered with multiple urgent care and immediate care facilities, offering them Doppler studies and telemedicine visits, and new urgent and emergent procedures came from these new relationships as well.

We sent out weekly communications to all the referring doctors that we were open, the OBL was functioning, and we were compliant with all CDC and Department of Health guidelines and safety practices. With elective cases placed on hold, volume initially dropped to < 50% of regular cases, then with an increase of new relationship urgent cases and dialysis cases, our volume increased to between 60% and 70% in the next 2 months. The total number of dialysis graft interventions and catheter placement increased overall in the last 3 months because we were one of the few outpatient facilities open. In July, we were at 90% of our previous volume since the pandemic started in March.

### Of the procedures you perform in your OBL, which volumes were most significantly affected and why?

**Dr. Khatib:** In the beginning, elective procedures for claudication, heart catheterizations, and loop implants were significantly affected, but all other procedures were not affected. We have seen resurgence in new referral patterns after the peak because patients are favoring

outpatient settings. I also believe the lower-cost setting will be more favored as the economic stress continues.

**Dr. Fisher:** I do not perform a lot of elective procedures, so most of my procedures were not affected. I perform procedures more in the range of urgent to semi-urgent. So, iliofemoral deep vein thrombosis (DVT), chronic DVT with alteration, patients with rest pain and ulceration from arterial disease—these shouldn't wait. I've picked up some patients from hospital-based physicians who were unable to perform procedures.

**Dr. Noor:** All elective procedures were placed on hold, such as any procedures for claudicants, diagnostic angiograms, and elective venograms for symptomatic iliac vein compression. This accounts for 70% of our usual volume.

**Dr. Garcia:** Elective procedures, whether arterial or venous in nature, were the most affected. We adhered to state and national recommendations, performing only those procedures that were deemed urgent/emergent. All elective procedures as well as normal office visits were rescheduled. As previously mentioned, this led to a 60% drop in volume for the practice.

### What changes have there been in interactions with local hospital referrals? Has your OBL had to take on more or fewer cases referred out by hospitals?

**Dr. Noor:** The hospital had completely stopped urgent and elective cases, so those patients were brought to the OBL to have procedures done if they were appropriate cases. We increased staffing and hours to accommodate additional procedures that needed to be done. These procedures were mostly critical limb ischemia, DVT, hemodialysis graft interventions, and some catheter placements.

**Dr. Garcia:** The major change in hospital referrals was due to a decrease in admissions and therefore subsequent referrals for April and May. Both the hospital and OBL postponed nonurgent, elective cases. There were a few instances where urgent cases were performed in the OBL due to patient requests to avoid the hospital. For example, patients with chronic DVT were postponed given their chronic, nonemergent status. Like many institutions, we had COVID-19-positive patients who experienced thrombotic events and needed urgent attention. With the reopening of many businesses in the state, both the hospital and OBL practice are essentially back to running at full capacity with both referrals and scheduled cases.

**Dr. Khatib:** We have seen more referrals, but they are more so from patients seeking an office-based setting than from hospitals. We have also seen a definite drop in hospital procedure and census volumes that continues to date. I believe there is a real window of opportunity for better cooperation with the hospital systems for the common good.

**Dr. Fisher:** Local hospital referrals have not necessarily been affected. The biggest issue has just been beds and our capacity to get work done. Right now, it's not necessarily a bed crunch but more of a personnel crunch. Nurses are testing positive for COVID-19 in blocks and they also work very close together, so the risk of spread is high there. So, it's just our ability to accommodate patients and have the personnel there to take care of them that's been a challenge.

### How have you modified processes/patient flow in the OBL to ensure patient and health care worker safety? How have you managed testing/screening of patients for COVID-19?

**Dr. Khatib:** We have followed the ever-evolving CDC guidelines. We originally had a team A and team B approach, which became harder to follow later on with vacation time planned. We have tried to procure on-site testing for our staff and patients to reduce the wait and inconvenience of testing elsewhere as well as the time lag for results; however, we have only been successful in procuring antibody testing, which is less helpful unless IgG is positive, and even then accuracy might be questionable.

**Dr. Garcia:** We have followed state, CDC, and societal guidelines for handling patient flow as well as screening patients for COVID-19. All hospital patients, whether admitted or undergoing a procedure, get tested for COVID-19 by the hospital within 48 hours of the scheduled case. All patients are tested upon being admitted. Concerning the OBL and clinic patients, they are all questioned via phone the day prior to arrival, their temperature is taken on arrival to the clinic or OBL, and they fill out and sign the standard COVID-19 questionnaire. All patients are required to wear a face mask. There is a limited number of patients in the waiting room at one time, with social distancing in place. Additionally, family members wait in their car while procedures are being performed.

**Dr. Fisher:** We have a very rigorous screening program where a couple of days before the procedure, the patient is forwarded an assessment and provided information about the procedure. Two days before the procedure,

we call and ask about the basic things and remind them about handwashing and wearing a mask out in public. The day of the procedure, the patient has their temperature taken upon entering the door and they are again screened to understand if they've had any sick contact or have symptoms of COVID-19. If there are no flags during the screening process, we proceed. If there's an issue or if we have any questions, we have a very low threshold for canceling or rescheduling the case.

We follow screening protocols based on the CDC recommendations. We basically use that as a blueprint as far as screening is concerned. Testing has been fairly limited outside of the hospital setting, although we do have community-wide testing. To be able to coordinate testing patients for COVID-19 and then decide how long to quarantine patients has been a challenge.

**Dr. Noor:** We adopted CDC guidelines, and all employees and patients entering the facility have their temperature checked before entering the facility with a mask. A mask is provided if they do not have one. All patients are called the day before to confirm their appointment and answer a set of COVID-19 questions related to recent travel, exposure to a family member exhibiting COVID-19 symptoms, or if they themselves were sick. If there is an affirmative answer to these questions, the appointment is rescheduled.

Starting in July, any patient who requires a procedure has to have a COVID-19 nasal swab test 3 to 5 days prior to the procedure, in addition to not being sick or having been around someone who has a positive COVID-19 test, not having traveled to any of the blacklisted states, and being completely afebrile and asymptomatic on the day of the procedure. No family members are allowed in the facility, and they must pick up the patient after the procedure from the back door only. No families are allowed in the waiting room, and only one or two clinic patients are allowed to enter the facility at a time, while others wait in their cars.

Any employee who is concerned they have COVID-19 is asked to stay at home and undergo a COVID-19 swab test. The OBL allows 5 days paid leave while they await the results. If the result of testing is negative, they return to work. If the employee tests positive for COVID-19, they quarantine until symptoms resolve and they are afebrile for 72 hours, and they must wear a mask for 2 weeks upon return to work. They must also provide a doctor's note to return to work.

### How has COVID-19 impacted your sedation/anesthesia protocols?

**Dr. Noor:** Patients are screened for COVID-19 symptoms such as fever, cough and shortness of breath, and

if they have any of the symptoms, the procedure is rescheduled. We have not treated any COVID-19–positive patients and have not changed our sedation protocol.

**Dr. Garcia:** In the hospital, I have utilized the anesthesia team more readily than the pre-COVID-19 scenario. In the OBL, I have been more cautious in the initial moderate sedation dosage.

**Dr. Khatib:** Our sedation protocol has not changed much. We only perform conscious sedation so that was not an issue. Of course, hospital procedures requiring intubation or general anesthesia have been impacted.

### **How has your follow-up care scheduling been modified, and are you incorporating telehealth? What are your current protocols?**

**Dr. Khatib:** We have become more liberal in using remote patient monitoring for chronic conditions. We are quick to offer telehealth visits but have also come to learn that the value is limited in patients who are really sick. We have increased same-day appointment availability to reduce patient need to go to the emergency department.

**Dr. Noor:** Before patients leave the OBL, they are scheduled for a postprocedure follow-up appointment to take place 4 to 6 weeks later. Appointments are confirmed via phone the day before the follow-up appointment, where we usually perform a Doppler study. We adopted telemedicine on our electronic medical record platform in March, so patients are given the option to discuss the Doppler findings with either the doctor in person at the time of the Doppler study or with a telemedicine or a telephone visit later in the week as a remote follow up.

**Dr. Garcia:** We haven't significantly changed our protocols regarding follow-up scheduling except that the time to follow-up has been prolonged due to the overwhelming volume of patients as well as using social distancing and minimizing interaction in the office. Currently, postprocedure follow-up visits are now extended 3 to 4 months rather than the normal time of 4 to 6 weeks.

**Dr. Fisher:** Because our volumes weren't significantly affected, we have slowed scheduling to be able to spread appointments out more. We have quite a bit of patient referrals from out of state, so we had already incorporated telehealth into our patient care, but it's now become a larger part to accommodate our out-of-state patients.

### **If you were to begin planning an OBL practice to open in 2021, how would it differ from when you first opened your current office?**

**Dr. Fisher:** I think I would look for advice from an expert who already had a site open to work out some of the kinks regarding OBL setup to find what's optimal.

**Dr. Garcia:** Personally, because I took on all financial/business and clinical aspects of opening my current practice, I would probably delegate much more of the day-to-day business issues to the office manager and focus more of my time on the clinical care. I would also look for additional physician and nurse practitioner help sooner. One thing that has been very beneficial that I would not change has been the relationship with the hospital and having the OBL in the medical office building attached to the hospital. This has made life much easier, handling the OBL practice as well as hospital referrals and emergencies, as it is only a flight of stairs from the outpatient center to the hospital interventional radiology lab and inpatient vascular unit.

**Dr. Noor:** The design of the OBL may need to be larger to allow employees and patients more space for social isolation, in the waiting room, recovery room, and in employee workspaces. Employees would be educated and trained on safe practices for social isolation and wearing masks so they can answer patient questions before a procedure. Because patients and families have anxiety about having a procedure during a pandemic, explaining to them that the OBL follows all policies and is a safe place to have the procedure with low risk of COVID-19 is extremely important. Developing policies for employees regarding COVID-19 or such illnesses and for patients who may be exposed or may be sick the day of the procedure is essential. Additionally, although staff are aware that only one family member can accompany a patient to a procedure, this seems to be a sticking point for a lot of patients and family members, so upfront communication makes for a better experience for everyone. ■