Recommendations for Conducting Vitreoretinal Surgery During the COVID-19 Pandemic

Committee for Best Practices for Retinal Surgery during the COVID-19 Pandemic, American Society of Retina Specialists

Purpose: To provide interim recommendations on best practices to safely perform vitreoretinal surgery to protect vitreoretinal surgeons, OR personnel, and patients.

Surgical safety

1. If available, N95 masks are recommended to be worn underneath conventional surgical masks by surgeons, and staff who are within a 6 feet radius of the patient to prevent infection. HIGHLY RECOMMEND

2. Eye protection should be worn unless it significantly inhibits the ability of the surgeon to safely and effectively complete the surgery. HIGHLY RECOMMEND

3. The patient should be masked with a surgical mask over any oxygen administering device to prevent droplet transmission during surgery. HIGHLY RECOMMEND

4. MAC anesthesia should be used as much as possible, as intubation is an aerosolizing procedure and places those in the room at high risk for COVID-19 transmission. HIGHLY RECOMMEND

5. If general anesthesia is required, consider minimal personnel (anesthesiologist, circulating nurse) be present in the closed operating room during induction and extubation. Consider a delay after induction and extubation before the room is reopened to minimize aerosol spread. RECOMMEND

6. Consider use of negative pressure suction, and sleeves to minimize air flow through the drape to reduce exposure to viral droplet particles. RECOMMEND

Patient Considerations

1. If possible, all patients should receive COVID-19 testing as close to the time of surgery as possible and be asymptomatic for surgery. Note there can be a high false negative rate (up to 30% reported depending on the test. RECOMMEND

2. Timing of surgery for COVID-19 positive patients who are symptomatic or asymptomatic should be an individualized decision based on urgency, medical co-morbidities, risk of infectivity, overall visual potential, and status of the other eye. RECOMMEND

Surgical Considerations

1. To minimize exposure, every attempt should be made to be time efficient in performing the surgery while not sacrificing the critical objectives of the surgery. HIGHLY RECOMMEND
2. Consider having as few people in the room as possible to safely and efficiently perform the surgery. Avoid shift changes during the case among the nursing, technician and anesthesia staff. The presence and involvement of trainees in the surgery should be up to the discretion of surgeon and trainee. HIGHLY RECOMMEND

3. One may want to consider using silicone oil tamponade in select patients with high risk of hospitalization to minimize post op visits and potential risk for early reoperation in patients with high risk of COVID-19. RECOMMEND