



Proposal for Elective Procedure Infectious Risk Stratification for Risk Mitigation, PPE Preservation, and OR Anesthesia and Procedure Protocols for Patients with a Negative Covid Protocol Screen

- **High Risk:** Prolonged or high volume respiratory epithelial exposure: PAPR/CAPR or N95 mask with face shield if loupe magnification or headlight needed with negative pressure room if available. Standard 2-week patient self-quarantine, without symptoms, afebrile, with negative Covid test (results available 24-48hours before procedure) with appropriate anesthesia protocol with glide scope, PAPR/N95 mask and face shield, negative pressure room if available.
- **Intermediate Risk:** Shorter exposure of AGP's, (i.e. Second stage of labor, ECT Procedures, Laparoscopic cases using filters for CO2 exhaust. Orthopedic procedures with extensive bone drilling using Standard Ortho Hood with surgical mask or surgical mask and face shield). Standard 2-week patient self-quarantine, without symptoms, afebrile, with negative Covid test (results available 24-48hours before procedure) with standard anesthesia protocol and use of glide scope. (Consider droplet precautions instead of N95/PAPR for intubation if PPE an issue).

Please note that there is intentional ambiguity in the intermediate and low-level risk classification to specifically allow for physician judgment, as not all cases of a category are the same. If the surgeon/proceduralist feels a case should be either downgraded or upgraded, this just needs to be communicated with the operating room medical director and anesthesia staff so they can plan accordingly. Elective upgraded cases will proceed based on PPE availability.

- **Low risk:** Non-AGP/Minimal AGP with minimal bone work or bleeding, Local or minimal sedation IVCS, (i.e. cataracts surgery, local podiatry procedures, distal upper or lower extremity Ortho surgery, etc.). These patients will undergo the pre-procedure protocol as above with Covid testing so that results are available 24-48 hours before the procedure, a self-acknowledged 14-day quarantine, and be asymptomatic and afebrile. The Patient will wear a mask during the entire time beginning with entry into the facility and during the entire pre, intra, and post-op process. These patient's procedure would be performed with droplet precaution and eye protection/face shield. Low risk procedures requiring heavier sedation or potential for general anesthesia which would include total or endoscopic joint procedures and

soft tissue surgery not involving the airway such as breast or neck would be done with Droplet precautions with eye protection/ face shield. They would undergo the pre-procedure testing protocol as above. The anesthesia would be done per the anesthesia protocol.

Note: Assignment of cases to the different protocols will generally be made by consensus of the entity surgeons initially and then reviewed with the anesthesia and nursing team. Not all cases of a category are the same and the protocol allows for surgeon judgement, although PPE availability will likely be a factor in the number of elective high-risk cases being done. Failure of the patient to follow the protocol could result in cancellation of the elective surgery at the discretion of the surgeon and anesthesia staff.

Background:

The categories above and determinations below were made after discussions with the All Sharp entity committee which included Epidemiologists, Infectious Disease Consultants, Anesthesia, Surgical, and Nursing Staff, in addition to Entity leadership.

The above risk stratifications assume for the High and Intermediate levels that the patient has done the standard pre-op elective screening protocol. This would consist of a 14-day self-quarantine, a negative Covid test result at 24-48 hours pre surgery and be without symptoms, and afebrile. In the highly unlikely situation the patient was asymptomatic Covid (+) after the above, the viral titer and infectious risk would be extremely low. This protocol can be set up through the particular hospital/entity process (i.e. PAES at SMMC or the Care Clinic at SGH) just like the current protocol and can also be adapted to any existing protocols in the clinic.

The rationale for this is well stated by our Epidemiology, ID, and IP colleagues. The 14-day quarantine is the most supported in all the discussions seen regarding incubation time and time to release people from isolation after recovery from Covid19. (70% of infected patients are symptomatic at 1 week and virtually 100% at 2 weeks), so it seems that risk of transmission from people who are asymptomatic after a 14-day observation period and have a negative Covid test should be very low. A Covid test with results within 24-48h of surgery per protocol of the entity, is for the time being the best option we have to identify potentially asymptomatic but infected patients and change surgery/intervention plans accordingly.

Definition of 14-day self-quarantine:

The main point of emphasis with the patient would be restriction of outside exposures to decrease their risk of peri-procedure infection. As long as the patient and the members of their household use social distancing and masks while out of their home (which for the patient should be limited), that meets the requirements. No additional further isolation within the house would be needed if all members are healthy and without symptoms. The fact that the patient has an increased risk of morbidity and mortality should they not follow the protocol and be infected at the time of surgery should be emphasized with the patient, and even considered as part of the consent. Sample Physician Office and PAES/Nurse Clinic Scripts are being developed for patient communication.

Other Concerns: Exhaust CO2 from laparoscopic cases were addressed by SAGES who felt that a filter on the gas exhaust would filter any virus particles, making standard droplet precautions acceptable.

The potential for bovie smoke aerosol particles from blood or tissue, while hypothetically possible (but not proven), would be extremely minimal given the low viral titers that would likely be the case in an asymptomatic, test negative, Covid positive patient with non-respiratory epithelial tissue.

Anesthesia: In light of the low risk of infection after using the 14-day quarantine and protocol testing of patients, having significant viral titers and being an infectious risk to the anesthesia staff should be minimal. To that end appropriate anesthesia protocols are being established with ASMG and the Sharp System to provide safe, PPE utilization sensitive anesthesia delivery for the Sharp System patients, and hence are not addressed in this document.

PPE is still a severely limiting factor and will most likely determine/limit the number of high-risk elective cases that will be able to proceed until the supply of N95 masks improves. High risk cases will be prioritized based on case urgency and PPE availability.

All of the above assumes a stable or improving Covid-19 environment!