

Response to the Letter: How do we reopen our motility lab safely and efficiently?

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Acknowledgement: ANMS Task Force

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Disclosures: Consultant Diversatek Healthcare. No conflict of interest for this project.

We appreciate the insightful comments from Drs. Chang, Berg, and Rezaie regarding our Motility/GI Physiology Laboratory re-entry recommendations amidst the COVID-19 pandemic. The comments consist of three themes: differences in COVID-19 testing for aerosolized versus non-aerosolized tests, the high false-negative rate for COVID-19 testing, and logistical timing issues between COVID-19 results and scheduling Motility/GI Physiology Laboratory tests.

The recommendations for safely and efficiently re-opening Motility/GI Physiology Laboratories were rooted in numerous endoscopic societal guidelines as both esophageal manometry and catheter-based pH testing have potential for aerosolization similar to upper endoscopy. These Motility/GI Physiology tests offer the highest probability for spreading COVID-19 to Allied Health Professionals who perform these tests, and not to physicians directly as the case may be with endoscopic procedures. As such, we based our recommendations from the Allied Health Professional (nurses, technologists, and medical assistants) viewpoint rather than physicians. Often, safety and efficiency guidelines are constructed at the physician and administrator level rather than the perspective of the Motility/GI Physiology Allied Health Professional. This is particularly relevant here, as the Allied Health Professional is the health care provider at the front line for Motility/GI Physiology tests.

The diversity of Motility/GI Physiology Laboratory testing offers a challenge for safely re-opening during the COVID-19 pandemic. Available data suggest that up to 55% of patients infected with COVID-19 have SARS-CoV-2 in their stool^{1,2,3}. We agree with the premise that the probability of spreading or contracting COVID-19 via stool or flatulence is unknown, and probably small. However, anorectal manometry, balloon expulsion testing and pelvic floor biofeedback patients have the propensity to discharge air particles (aerosolized and/or flatulence) during simulated defecation maneuvers, especially when increasing abdominal pressure during

the Valsalva or cough maneuvers. The Asian Neurogastroenterology and Motility Association (ANMA) published their Motility/GI Physiology Laboratory COVID-19 re-open position statement with 7 of the 11 experts indicating both Esophageal and Anorectal Manometry procedures as high-risk for spreading air particles during the procedures⁴. Therefore, our task force concluded by consensus that Motility/GI Physiology Laboratory leadership must implement mandatory PPE requirements as safety measures and educate Allied Health Professionals to assess patient symptoms and temperature before any Motility/GI Physiology procedure. These recommendations are becoming more important as COVID-19 is surging in many parts of the US.

Since Motility/GI Physiology Laboratory procedures may be categorized as urgent, semi-urgent, or elective depending on their likelihood to spread COVID-19, Motility/GI Physiology Laboratory leadership should implement a consistent and standard pre-procedural COVID-19 screening program. Although studies have demonstrated high false-negative rates for identifying COVID-19^{5,6}, a standard pre-procedural COVID-19 screening program provides a rigorous method for identifying potential COVID-19 positive patients. These screening programs have been implemented institution-wide in many centers, and not specific for Motility/GI Physiology Laboratory procedures. Furthermore, this methodology allows for streamlining communication between Allied Health Professionals, providers, and business office staff, promoting Motility/GI Physiology team morale. We recognize the increased time commitment for implementing a Motility/GI Physiology Laboratory COVID-19 safety plan. Therefore, with certain procedures such as the Wireless Motility Capsule and Hydrogen Breath Testing, providers may elect to use alternative methodology (patient ingests motility capsule alone in a room) or alternate tests (home breath testing kits) limiting the need for pre-procedural COVID-19 screening⁷.

We also agree with the comment related to the logistical challenge for scheduling Motility/GI Physiology Laboratory procedures during the COVID-19 pandemic. The mandatory PPE for each procedure should be donned and doffed correctly regardless of pre-procedure COVID-19 screening results. As we move forward with re-opening Motility/GI Physiology Laboratory operations, as a local leadership group, physician directors, allied health staff, administrators, and business office personnel, should strategize to enhance methods for streamlining communication among team members to enrich the patient experience during the COVID-19 pandemic. Using strategies to consolidate multiple Motility/GI Physiology Laboratory procedures during a single encounter, limiting repeated need for COVID-19 screening tests, work-absenteeism, and PPE requirements may extend beyond the COVID-19 pandemic, and will build patient loyalty.

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