Endoscopists Are Commonly Exposed to Bacteria During Endoscopy

John R. Saltzman, MD reviewing Johnston ER et al. Gastrointest Endosc 2018 Oct 31

Cultures of face shields after endoscopy showed a 46% exposure rate to potentially infectious bacteria.

Current recommendations for endoscopists include the use of face shields to reduce the potential for exposure to infectious pathogens. However, data showing the risks and benefits of wearing protective shields are lacking, and the shields can be uncomfortable. Thus, currently many endoscopists do not routinely wear protective face shields during procedures.

In a carefully designed study, the rate of bacterial colonization of face shields worn by four endoscopists after 239 endoscopy morning sessions (1100 procedures) was compared with face shields located 6 feet away from the patient and with pre-session control shields. Each face shield was systematically swabbed, and the results were reported as no growth or by the presence and number of colony-forming units (CFUs).

Compared with the pre-endoscopy control, the endoscopist face shield had a higher positive CFU rate (46% vs. <5%) as did the shield 6 feet away (21%). A CFU of >15 was considered a definite infectious exposure, and this occurred on the endoscopist's face shield in 5 per 100 endoscopy sessions and at 6 feet away in 3 per 100 sessions.

COMMENT

This thought-provoking study makes me wonder how many of us have been exposed to a wide variety of infectious pathogens through our careers. It is also disconcerting that this risk was not only to the endoscopist's face but also 6 feet away from the patient. However, the presence of bacteria does not necessarily equate to transmission of an infectious disease. Until further studies identify the pathogens to which we are exposed as well as the health consequences for the endoscopist, it would be wise to routinely use face protection during endoscopy.

CITATION(S):