

Flatus: An aerosol generating concern during the COVID-19 pandemic

Editor

Since the outbreak of coronavirus 2019 (COVID-19), guidelines have been developed to protect health care workers (HCW) globally. Aerosol generating procedures (AGPs) have been of particular concern¹. Within aerosols, viral particles can be detected up to three hours after aerosolization². The World Health Organization has published guidelines on the use of personal protective equipment (PPE) for COVID-19 with specific instructions for healthcare workers performing AGPs. These include the use of a respirator (N95, FFP2 standard, or equivalent), gown, gloves, eye protection and apron³.

Recently endoscopic procedures have also been considered as aerosol generating. The British Society of Gastroenterology, European Society for Gastrointestinal Endoscopy, American Society for Gastrointestinal Endoscopy and World Endoscopy Organization have recommended the use of PPE for AGPs while performing endoscopic procedures. However, there has been no clear consideration for ward based procedures.


Wang *et al*, cultured faecal specimens of COVID-19 positive patients and identified live SARS-CoV-2 virus⁴. Similar studies have also identified faeces as a potential source of transmission. Flatus disseminates

gastrointestinal contents⁵, and the identification of SARS-CoV-2 within faeces, suggests that flatus can also be a source of transmission of COVID-19 when it is not contained.

General surgical emergencies present situations where HCWs are exposed to flatus generating procedures (FGP), including rectal examination, stoma examination, proctoscopy and rigid sigmoidoscopy and/or insertion of a flatus tube.

The evidence of viability of SARS-CoV-2 virus in faecal specimens and faecal-oral transmission, supports recommendations in the use of appropriate PPE. There is also additional risk of mucocutaneous exposure to infectious body fluids during FGPs.

Due to the potential generation of aerosols and shedding of SARS-CoV-2 in faeces, we believe that procedures generating flatus at close proximity to HCWs faces warrant full PPE and wherever possible the AGP guidelines should be adapted to flatus generating procedures performed on the ward.

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