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Perioperative Care and Operating Room Management

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Perioperative Care & Opera<u>ting Room</u>

Management

The risk of transmitting the coronavirus to the perioperative team through aerosols produced in the operating room bathrooms

ARTICLE INFO

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Dear Editor

Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2). [1] The disease is spread through the respiratory particles of infected patients, when coughing, sneezing, breathing, or talking, and is transmitted by inhalation of these droplets by others. The best way to prevent and reduce the rate of disease transmission is to have up-to-date information about the COVID-19 virus, its pathogenicity, and how it spreads. [1] COVID-19 can more easily spread due to poor ventilation in enclosed spaces.[2] Bathroom toilets are also one of these closed places and can spread the virus in the air.[3] Aerosols that are produced in toilets can contain the coronavirus, [4] because there is evidence to suggest that the ribonucleic acid (RNA) of coronavirus is present in the feces.[5] It has been observed that even urine can contain the coronavirus. [6,7] Today, evidence shows that flush tanks used in toilets can facilitate the transmission of the coronavirus. This is because the rapid airflow created by flush tanks causes particles and viruses to spread in the environment around the toilet. [3,8] There are several kinds of toilets in the operating room, and therefore these pose a potential risk for spreading the virus. To decrease coronavirus spread, infection control should be enforced in all bathrooms throughout the hospital which may be used by patients and/or hospital personnel. The operating room personnel wear special scrubs that are only worn in those areas. They can potentially spread the virus between staff and patients in these perioperative areas such as preoperative holding area, the operating room, and the recovery room. Based on the above evidence, it is important, after using the operating room toilets, to wash hands with soap and water for 20 to 30 seconds or use an alcohol-based cleaning solution. To sum up, while using the toilet, we would argue that one should use a suitable facemask for additional protection and hospital facilities need to make a concerted effort to have all bathrooms thoroughly cleaned and disinfected on a regular basis.

Author contributions

Study conception and design: Mahdieh Soleimani. Acquisition of data, Study supervision: Amirmohammad Merajikhah. Analysis and interpretation of data: Atefeh Beigi-khoozani.

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Declaration of Competing Interest

All authors do not have any actual or potential conflict of interest

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