Nasogastric tube insertion in an awake COVID-19 patient: Think beyond airway

Sir,

The Nasogastric tube (NGT) in ward and intensive care unit (ICU) is mainly indicated for gastric decompression, upper gastrointestinal bleed, aspiration prevention, enteral feeding and medication. Although NGT is considered as non-aerosol generating procedure in few studies,[1] we encountered a case in which NGT insertion leads to repeated coughing. We wish to highlight the importance of safe insertion of NGT during the COVID-19 pandemic. Informed written consent has obtained.

A 40-year-old male patient, a known case of intra-thalamic bleed shifted to the ICU for further management, patient was having pneumonia and tested covid-19 positive. NGT insertion was planned in this patient in view of initiation of enteral feeding and medication as the patient was disoriented and irritable. Under aseptic precaution and with standard personal protective equipment (PPE), NGT insertion was tried with standard technique but patient started repeated coughing and sneezing during the procedure. As the patient was COVID-19 positive, we topically anaesthetized the nasal cavity and posterior pharyngeal wall of the patient with 10% lignocaine spray 2 puffs in left nostril and 2 puffs sprayed on the posterior pharyngeal wall. NGT insertion was again tried by healthcare person after wearing PPE with successful placement of the tube [Figure 1].
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The aerosol-generating procedure like airway management in COVID-19 patient is high risk to healthcare workers and should be attempted with all preventive measures including PPE, after proper muscle relaxation, in negative pressure room, by the most experienced airway expert available and other measures as described in airway consensus guidelines for COVID-19. But there are no such specific guidelines for NGT insertion in non-intubated patient. NGT insertion has very high failure rate up to 50%, so multiple attempts may be needed leading to increased time spent near the patient, also by nasal mucosa and pharyngeal wall irritation can stimulate sneezing, coughing and vomiting. NGT can easily enter the trachea resulting in gag and cough reflex in an awake patient.

So the clinician and paramedical staff may be at very high risk of aerosol contamination, while attempting NGT insertion in an awake COVID-19 patient. Barrier devices (aerosol box) can be used during NGT insertion keeping in mind some limitations of it such as increased time for the procedure, decreased first attempt success rate, breach in personal protective equipment, efficacy to contain aerosol and also patient compliance when attempting in an awake state.

We recommend that NGT insertion should be postponed till the negative COVID status, whenever possible. But when NGT is crucial for the management of patient, we advise to use PPE to protect healthcare person in addition to application of topical anaesthesia to mitigate sneezing and coughing during the COVID-19 pandemic.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest
There are no conflicts of interest.

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