Editorial

We would like to present the protocol that we came up with, to perform tracheostomies in COVID patient, keeping the safety of healthcare workers in mind. We performed 16 tracheostomy procedures in COVID patients using the following guidelines with no risk to the patients or the healthcare workers. The following is the protocol with the points of discussion:

- Multidisciplinary decision making for need of tracheostomy
- Informed consent
- PPE donning and doffing education and planning
- Location of surgery
- Same team
- Equipment, barrier precautions, PPEs
- Sequence of procedure and Technique

It is crucial that the donning and doffing procedures are carefully followed, as improper removal may result in operator contamination. The procedure was performed at the bedside in the ICU in negative-pressure rooms. This avoided unnecessary transport of patients on ventilators with PEEP, contamination of hallways, elevators, and repeated connection and disconnection of ventilatory circuits during transfer. Bedside tracheostomies in the ICU should be well-orchestrated events, meticulously planned and rehearsed. Specific considerations include negative pressure ventilation in the ICU room, positioning of the patient, and the movement of essential equipment and surgical instruments. Combining PEG tube placement and consolidating the necessary equipment and personnel makes for a safe and efficient process. The time of exposure to aerosolized secretions should be minimized. This may be achieved by ensuring complete paralysis of the patient throughout the procedure to prevent coughing, stopping mechanical ventilation at an expiratory position just before tracheotomy, and reducing the use of suction during the procedure. If suction is used, this should be within a closed system with a viral filter. Suctioning also diverts a high inoculum away from the surgical site. (Reference of volume of inoculums leading to possible contracting infection and degree of infection).

Percutaneous tracheostomy involves bronchoscopy and serial dilations during trachea entry with possibility of increased aerosolization. These factors result in increased aerosolization risks compared with open tracheostomy, in which entry into the trachea is performed quickly with an incision and aerosolization risks are mitigated as discussed. As such, open tracheostomies were favored over percutaneous. The experience of the team is clearly of importance to minimize time spent in the contaminated room. Having a dedicated, experienced team comprising a surgeon, an assistant, an anesthetist, and a scrub nurse to perform tracheostomies will allow familiarity and minimize setup time. Of note we used the same team for all the procedures and discussed the steps of the procedure and plans well in advance. Communication during the procedure would be difficult due to PPEs and would lead to missteps as well as delay during the procedure with increase in time of procedure and viral exposure.