Sheet Barrier and Intubating Stylet

Subjects: Respiratory System

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Coronavirus disease 2019 (COVID-19), a respiratory syndrome caused by SARS-CoV-2, can be transmitted through respiratory droplets and aerosols of droplet nuclei. Aerosol-generating medical procedures (AGMP) are needed to take care of critically ill patients but place health care providers at risk of infection. With limited supplies of personal protective equipment (PPE), barrier systems were developed to help protect health care providers during tracheal intubation. The video intubating stylet shows promise to become the preferred intubation device in conjunction with plastic sheet barriers during the COVID-19 pandemic.

COVID-19 endotracheal intubation tracheal intubation video intubating stylet plastic sheet barrier

Since the first case of viral pneumonia was reported from Wuhan, China in late December of 2019, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative pathogen for the Coronavirus disease 2019 (COVID-19) pandemic, has run rampant across the world [1]. As of 30 September 2021, there have been 232,636,622 confirmed cases and 4,762,089 COVID deaths [2]. As cases grew at an alarmingly exponential rate, it was quickly identified that COVID-19 could be transmitted through respiratory droplets and even through the aerosolization of droplet nuclei [3][4]. Because of the pathology and progression of the disease towards respiratory failure, aerosol-generating medical procedures (AGMP) such as laryngoscopy, endotracheal intubation and extubation, tracheostomy, bronchoscopy and bronchoalveolar lavage, positive pressure ventilation, cardiopulmonary resuscitation with bag-valve-mask, suctioning, and nasopharyngeal aspiration and washing would be necessary to take care of patients with COVID-19 infection [5]. Healthcare providers in the fields of anesthesiology, critical care medicine, emergency medicine, and otolaryngology, because of their roles in performing AGMPs for these patients, found themselves at risk of infection.

References

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