Ultimately the suspension order for performing elective endoscopies will end. All patients undergoing GI endoscopies should be considered as a high-risk opportunity for the spread of SARS-CoV-2 to other patients and endoscopy team members until the transmission of COVID-19 has been significantly contained or an effective vaccine has been administered.

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REFERENCES

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Modified Wake Forest Type Protective Shield for an Asymptomatic, COVID-19 Nonconfirmed Patient for Intubation Undergoing Urgent Surgery

To the Editor

The United States now has the highest numbers of coronavirus disease (COVID-19)–positive patients and deaths in the world. Supplies of personal protective equipment (PPE) such as powered air-purifying respirators (PAPRs) and N95 masks are still inadequate.

Supplemental digital content is available for this article. Direct URL citations appear in the printed text and are provided in the HTML and PDF versions of this article on the journal’s website (www.anesthesia-analgesia.org).

Tracheal intubation is a common medical procedure and creates aerosol spread. These aerosols create risks for medical staff and can result in room contamination.1 A protective shield and tent method (acrylic shield and plastic cover) was recently introduced by Dr Douglas Ririe at Wake Forest University.2 The shield and tent method has some advantages over box shields3,4: (1) it is easier for the laryngoscopist to move their arms and hands under the tent; (2) easier access to equipment and assistance during intubation; (3) less expensive (box shield costs $2505); and (4) less bulky and lighter (1.1 vs 4.5 kg). However, these acrylic shields are in high demand and generally unavailable at this time. Therefore, we decided to make a similar shield. It was difficult to make an entire shield in acrylic, because specialized equipment is needed to heat and bend the acrylic. Therefore, we created a similar device using readily available acrylic sheets and metal brackets. These materials were purchased at a home improvement store (approximate cost of $20). The shield is built from 2 pieces of acrylic material and 2 metal brackets (Figures 1–2). The metal brackets were made (ie, bent at home over the edge of a table) from off the shelf 4 foot lengths of steel, 3.8 cm
wide. The acrylic sheets (top panel measures 28 × 36 cm, vertical panel measures 28 × 30 cm) were fastened to the sheet metal strips with nuts, bolts, and washers. The angle of shield is 30–35°. The height is 53 cm. The shield was created in <2 hours at the author’s (S.K.) home.

We report a use of this shield for an asymptomatic, COVID-19 nonconfirmed patient for tracheal intubation who was undergoing an urgent shoulder surgery. Written consent was obtained from the patient for this publication.

First, a plastic cover was taped on the acrylic panel, creating a tent. The shield and tent were placed at the head of the surgical table, and the tent was pulled back. Then the patient was placed on the surgical table. When a facemask was placed for preoxygenation, the patient was covered with the tent. A second anesthesia provider was at the bedside to support the laryngoscopist. Rapid sequence induction was performed. A video laryngoscope was used for intubation. Intubation was done smoothly. The visibility through the shield was excellent (Supplemental Digital Content 1, Video, http://links.lww.com/AA/D109, which demonstrates tracheal intubation using the shield and plastic tent).

In addition to following current recommendations for intubation,6 we recommend:

1. Notify the patient of the use of the device, and that a plastic tent will be placed over the patient’s face. The plastic drape is transparent; however, some might feel claustrophobic.
2. Place a suction tube, tape or Tegaderm to cover the eyes, and tape to secure the endotracheal tube under the tent. In addition, it is advisable to have a second provider help the laryngoscopist (eg, airway manipulation, lifting jaw, applying cricoid pressure, turning on the ventilator).
3. Our device can be used for extubation, as well. With the current design, the metal parts do not contact the patient’s body. However, if used during the procedure, make sure that the metal parts of the shield do not come into contact with the patient.
4. Cleaning: The shield itself is reusable and needs to be thoroughly cleaned with hospital-grade germicidal wipes or hydrogen peroxide after each use. The plastic tent should be discarded once it is used.

In summary, in addition to the use of PPE, this shield might mitigate the risk of viral transmission and room contamination. Our device is relatively inexpensive, less bulky, lighter, and easy to assemble.

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REFERENCES


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COVID-19: Intubation Kit, Intubation Team, or Intubation Spots?

To the Editor

We read with great interest the article by Lopez et al,1 and we would like to add some comments to their excellent study.

Coronavirus disease 2019 (COVID-19) patients pose unique challenges for airway management. Anesthesiologists are called to deal with the risk of