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3 **A surgical mask worn by the patient in addition to the barrier**
4 **box reduces the droplet spray during endoscopy**

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10 Recent guidelines for the prevention of COVID-19 advocate that all the elective
11 procedures should be postponed as these produce aerosols that may affect the
12 staff engaged. Sagami R et al and Neven L et al published the use of a barrier
13 box to prevent the spread of droplets.^{1, 2} We have done some modifications to
14 this technique.

15 Our endoscopic shield is made of three plastic square walls with a height and
16 width of 50 cm and a length of 40 cm. The wall facing the patient has a hole of
17 10cm for insertion of the scope. The foot and head sides of the cube are left
18 open. The opening in the head side helps the assistant to keep the patient in
19 proper position, along with the mouth-piece and nasal prong. One may argue
20 that it would lead to the spread of droplets but the previous study has shown that
21 the droplets fall more on the wall facing the patient's mouth, hence placing the
22 surgical mask over the patient's face further reduces the head-ward spread of
23 droplets.³ This also helps to facilitate the to and fro movement of the box so that
24 the intubation hole moves away and the intact part of the front wall faces the
25 mouth.

26 A surgical mask with a small hole is placed in a way that the hole is aligned
27 with the mouthpiece hole. The shield is placed over the patient's head. The

28 scope is passed through the endoscopic port made in the wall of the shield
29 facing the patient and endoscopy is performed.

30 This technique has a few advantages. First, it gives free access to the assistant
31 during the procedure. Second, putting the face mask further reduces the risk of
32 the spread of droplets. Third, an appropriate window for endoscope insertion
33 allows the operator to work at ease, especially during challenging procedures.

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39 Reference

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53 **Step1: Nasal prongs for supplemental oxygen and mouth guard placed**
 54 **before sedating the patient**

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59 **Step 2: A surgical mask is placed with a small hole to accommodate the**
 60 **scope. The patient is then sedated followed by placement of the barrier box.**

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Step 3: The endoscope is passed through the barrier box window and surgical mask hole.



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Step 4: The barrier box is pushed down so the intubation hole moves away and now the intact part of the front wall faces the mouth.