

How to guarantee safety and optimal surgical view in COVID time

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Coronavirus disease-2019 pandemic¹ forces surgeons to face new challenges, also concerning practical approach to the operative theater. Cardiothoracic surgery is one of the most exposed to severe acute respiratory syndrome coronavirus 2 transmission because of the possible lung and airways injury so the personal protective equipment use is mandatory.^{2,3} Recommended full-face protection with a face shield may be uncomfortable because of the interaction with the prismatic surgical magnification glasses that guarantee the required precision.

To guarantee operator full safety without discomfort or detriment of the surgical field view, we developed a simple and low-cost technique to adapt disposable facial mask and allow the housing of customized surgical telescopes. The disposable mask is worn over the magnification glasses before the surgical scrub. The projections of the telescopes (with different size and distance for each surgeon) are drawn on the mask and, with the aid of a cautery, two circles are removed to house them (Figure 1 and Video1). To be sure of a



FIGURE 1 The disposable mask is worn over the surgical glasses and the projection of the customized telescopes are drawn on it. With the aid of a cautery, the two circles are removed to house the magnification telescopes. In this way, the mask perfectly fits the surgeon in the OR

perfect sealing between telescopes and protective screen, it is possible to start with smaller holes and to adjust them step by step.

AUTHORS CONTRIBUTIONS

CR: concept and drafting article. MC: drafting article. RR: revision of article. AM: revision of article.

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SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

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