

## Why not use the Easybreath snorkeling mask to prevent COVID-19 transmission during endoscopy procedures when FFP2 are lacking?

Coronavirus 2019 disease (COVID-19) is spreading all over the world. Endoscopy unit personnel are especially exposed to respiratory secretions (in aerosol-generating procedures) and feces [1].

Chinese endoscopy units [2,3] and endoscopy societies recommend the use of personal protective equipment, especially for procedures on patients with a highly suspected or confirmed COVID-19 infection.

Recently, Repici et al. published recommendations to prevent and control COVID-19 transmission during endoscopic examinations [4]. However, many countries are affected by a shortage of necessary equipment, especially N95 or FFP2 masks.

A few years ago in Europe, a sports equipment company (Decathlon, Lille, France) developed a snorkeling mask called “Easybreath” (► Fig. 1), which has recently been used as a protective mask in many hospitals. The company recently announced it would cease broad distribution of these masks to make them available for European hospitals.

In Tahiti’s endoscopy units, where FFP2 masks must be saved, we describe the possible use of the Easybreath mask as a protective device to replace FFP2 and FFP3 masks, goggles, and face shields. Pending 3D printing production of filters adaptable to the mask proposed by small Italian companies (Isinnova, Val Trompia), we used a surgical mask at the top of the snorkel to filter the air (► Video 1). This snorkeling mask has the advantage of being washable, disinfected, and reusable. This single unit provides full-face protection for endoscopy staff and appears to effectively safeguard the eyes, mouth, and nose from contact with the virus.



► Fig. 1 Aspect of the mask. **a** External aspect. **b** Internal aspect. **c** Aspect during endoscopy procedure.



► Video 1 Use of an Easybreath snorkeling mask to prevent COVID-19 transmission during endoscopy procedures.



► **Fig. 2** Easybreath mask. **a** Visibility of the endoscopy screen through the mask. **b** View of the endoscopist with the mask with a filter added on the snorkel.

In our experience, the endoscopic examination quality was not altered by reduced visibility (► **Fig. 2a**). This product is particularly efficient at preventing fogging (► **Fig. 2b**).

While the mask's affect may elicit ridicule, ridicule does not kill – not as much as COVID-19.

Endoscopy\_UCTN\_Code\_TTT\_1AO\_2AN

### Competing interests

The authors declare that they have no conflict of interest.

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DOI <https://doi.org/10.1055/a-1178-9125>

Published online: 29.5.2020

*Endoscopy* 2020; 52: E306–E307

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Stuttgart · New York

ISSN 0013-726X

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