

## BRIEF REPORT

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# Use of a Glove-Covered Mouthpiece during Upper Endoscopy to Prevent COVID-19 Transmission

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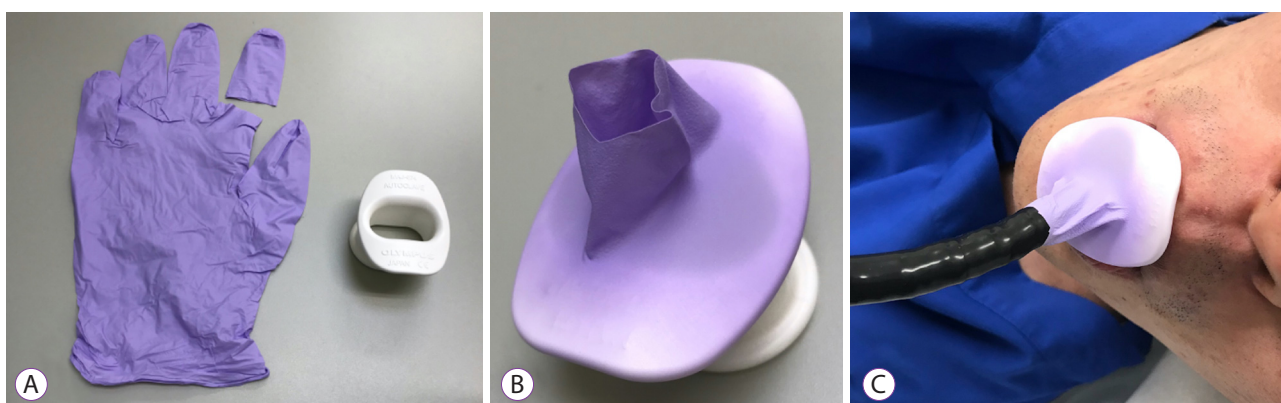
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Coronavirus disease of 2019 (COVID-19) caused by SARS-CoV-2 has become a global pandemic. All endoscopic procedures should be postponed until the spread of infection has subsided.<sup>1</sup> However, endoscopy may be necessary to diagnose and treat gastrointestinal cancers and bleeding. Aerosol dispersion due to coughing and retching during upper endoscopic procedures are considered an infection risk. Personal protective equipment (PPE) including face shield, N95 respirator (or surgical mask), cap, isolation gown and disposable gloves is recommended for the medical staffs, whereas patients should be masked until just before endoscopy.<sup>2,3</sup>

We have devised a mouthpiece to prevent aerosol dispersion

during endoscopy. This involved cutting the finger off a disposable nitrile glove, followed by cutting the tip of the finger off and then attaching the finger to the mouthpiece for use as the insertion port of the endoscope (Fig. 1A, B). This method was initially applied for overtubes to prevent air leak during endoscopic submucosal dissection. Endoscopic procedure remained feasible, and any aerosolized particles would be trapped by the rubber seal (Fig. 1C). No patients complained of breathlessness or experienced decreased oxygen saturation.

This “glove-covered mouthpiece” may be effective in combination with PPE to prevent transmission of SARS-CoV-2 infection by aerosolization during upper endoscopy.



**Fig. 1.** Glove-covered mouthpiece. (A) The finger of a disposable nitrile glove was first cut off. (B) The tip of the finger was then cut off and the finger was attached to the mouthpiece for use as the insertion port of the endoscope. (C) Any aerosolized particles would be trapped by the rubber seal.

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Conflicts of Interest \_\_\_\_\_

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