



Preoperative screening for COVID-19 is required in low-risk pediatric patients under the urgent surgical condition

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Dear Editor:

We read with interest the article entitled, “Early experience with universal preoperative and preprocedural screening for COVID-19 in low-risk pediatric surgical patients requiring general anesthesia,” by Sii et al. [1], which was published in the October 2020 issue of *Pediatric Surgery International*. The authors proposed a unique protocol to confirm the presence of the SARS-CoV-2 virus in surgical patients at low risk for developing the COVID-19 infection. These patients did not have COVID-19 symptoms or high-risk contacts in the preceding 14 days. Sii and colleagues [1] used the real-time reverse transcriptase-polymerase chain reaction (RT-PCR) technique on nasopharyngeal or oropharyngeal swab samples to detect the nucleic acid sequencing of the viral RNA; results were reported within 4 h of the test. However, in patients who underwent emergency surgery, the swab results were not required before the beginning of the surgical procedure. The swab results were routinely confirmed preoperatively only for patients who underwent semiurgent or elective procedures. We are concerned with the concept of universal screening for COVID-19 in surgical patients who are at low risk for infection; some readers may be misled by the messages conveyed by Sii and colleagues. Because a high viral load may be seen in pediatric patients who are either asymptomatic or have mild symptoms, preoperative COVID-19 screening is essential regardless of the presence or absence of visible symptoms or risk stratification before surgery [2, 3]. Therefore, regarding the need for preoperative confirmation of COVID-19, surgeons must weigh their decision between the urgency for the procedure and the time required to confirm the test. At the inception of universal screening for preoperative patients in May 2020, our

institute followed the same policies for patients at low risk for COVID-19 infection with a similar RT-PCR method that reported the results within 4–5 h of the test; the results were confirmed after the procedure in emergency cases. However, after adopting the automated molecular test Xpert[®] Xpress SARS-CoV-2 (Cepheid, CA, USA; hereinafter Xpert[®]) exclusively for patients requiring emergency surgery [4, 5], every patient could be screened for COVID-19 preoperatively regardless of surgical urgency. Xpert[®] could report results within 45 min by integrating the processing of nasopharyngeal swabs, RNA extraction, and RT-PCR. It also showed a positive agreement of 99.5–100% and a negative agreement of 95.8–100% with the existing RT-PCR-based test results [6, 7]. As is well known, the COVID-19 positive rate differs significantly from country to country, as does the range of available medical resources from country to region, so it is inevitable that appropriate modifications and combinations of test methods to suit each situation are necessary. However, to prevent the spread of the SARS-CoV-2 virus and end the COVID-19 pandemic rapidly, every effort should be made to screen patients before surgery with relevant methods, even if the surgical candidates are children and their risk of infection appears to be low.

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Declarations

Conflict of interest The author declares that they have no conflict of interest.

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