



Is There a Need to Screen Children for COVID-19 for Elective Procedures?

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Received: 30 March 2022 / Accepted: 6 April 2022 / Published online: 25 April 2022
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The world has been experiencing an unforeseen medical situation since the advent of the COVID-19 pandemic. While it baffled people, healthcare professionals, and governments all across the globe, it had a significant impact on the ongoing medical care of patients with chronic ailments. The shut-down of routine services and diversion of resources toward patients suffering from COVID-19 led to massive delays in various previously scheduled elective procedures and surgeries. Most hospitals implemented a universal screening program, wherein, all patients undergoing a procedure or hospitalizations were required to undergo prior testing for SARS-CoV-2. This is further hampering the care of affected children. There is a need to review the policy of universal screening of asymptomatic children before medical/surgical procedures and hospitalizations.

A cross-sectional study from Mexico to report the frequency of asymptomatic infection with SARS-CoV-2 in children undergoing invasive medical procedures warrants attention [1]. The SARS-CoV-2 RT-PCR test was positive in 9.4% of 700 tested individuals; none of these patients was symptomatic of COVID-19 [2]. The authors reported variable positivity rate (4.6% to 24.2%) over the 5 mo study period and this indicates the variable severity of ongoing transmission in community. The positivity rate of screening for COVID-19 among asymptomatic children ranged from 0.33% to 5% from various studies, lower than the index study. The rate of asymptomatic SARS-CoV-2 infections had been reported variable from 21% to 35%, after excluding presymptomatic cases [2].

The study [1] was done during prevaccine era and effects of vaccine on positivity rate and risk of transmission needs to be evaluated.

The patients with symptomatic COVID-19 are well known to transmit the virus. However, studies have also observed person-to-person transmission in asymptomatic COVID-19 infection. A systematic review and meta-analysis showed an asymptomatic transmission rate of 24.51%, though considerable heterogeneity in the population [3]. When population subgroups were analyzed, the asymptomatic transmission rate among familial clusters, adults, children, and healthcare workers was 15.72%, 29.48%, 24.09%, and 0%, respectively [3]. The study in question suggested that a tenth of all patients undergoing medical procedures may silently harbor infection with SARS-CoV-2 [1]. This is a considerable proportion as these patients may potentially transmit the virus to other patients and healthcare personnel.

The authors reported average cycle threshold (Ct) value as 35.8 (range 31.9 to 37.8) in their asymptomatic positive cases [1]. The higher Ct value suggest lower viral load and initial reports suggested very low/no risk of transmission, if Ct value was > 30, but later on, studies reported positive virus culture in up to 50% cases of Ct values > 30, suggesting infectivity [4]. Therefore, still there is no concrete cutoff of Ct values to suggest noninfectivity.

Most of the studies on the risk of transmission are from prevaccine period, and so, the effects of vaccination on transmissibility from asymptomatic carriers needs to be ascertained. Furthermore, appropriate use of personal protective equipment (PPE) by healthcare workers during the pandemic have shown significantly decreased risk of transmission.

The COVID-19 pandemic has already caused a significant delay in patient care; and routine screening of children for asymptomatic children may cause further delay in appropriate care for them. With availability of effective vaccines, low risk of transmission of COVID-19 from asymptomatic carriers (having high Ct values), and use of appropriate PPE, there is hardly any added risk to healthcare professionals, if routine screening of asymptomatic carrier is not done. This will facilitate timely management of children, jeopardized by COVID-19 by now. Recently, Indian Council of Medical

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Research (ICMR), New Delhi issued the guidelines for not doing a COVID-19 test before surgical and nonsurgical invasive procedures in asymptomatic patients [5].

Declarations

Conflict of Interest None.

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