

INTERIM PRE-OPERATIVE/PRE-PROCEDURAL GUIDELINES DURING THE COVID-19 PANDEMIC June 25, 2020

INTRODUCTION and BACKGROUND

SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus-2) was named by the WHO in February 11, 2020 as the novel coronavirus responsible for the coronavirus disease (COVID-19) that began in Wuhan, China in the late 2019 and has now spread across 213 countries including the Philippines.

COVID -19 in children is not as common and as serious as in the adult population. There are relatively fewer cases of COVID -19 among children, with incidence ranging from 0.8 to 2.2% in reported cases. 1,2,3,4 However, the true incidence of pediatric COVID-19 may be higher because of asymptomatic cases and children are less likely to be tested because of mild and subclinical symptoms. In one study, up to 13% of pediatric cases with SARS-CoV-2 infection were asymptomatic.5 The prevalence of asymptomatic SARS-CoV-2 infection and duration of pre-symptomatic infection in children are not well understood, as asymptomatic individuals are not routinely tested.6

There are limited studies on the incubation period among pediatric patients. Studies from China reported 2 to 10 days incubation period among pediatric patients. 7, 8

Signs and symptoms of COVID-19 in children appear to be mild and similar to other common viral respiratory infections with most cases presenting with fever, cough, nasal congestion, rhinorrhea, and sore throat. Thus, it is important for pediatricians to have a high index of suspicion of COVID-19 especially in the presence of exposure to COVID+household contacts.

The role of children in transmission to others is not clear. Limited studies show that transmission by symptomatic children is uncommon and some reports indicate that transmission of SARS-CoV-2 by asymptomatic children is possible.9

Patients who are scheduled for surgery, endoscopy10 and other procedures should always be assumed to be potential carriers of the virus throughout the duration of their hospital stay, even if they pass the pre-assessment triage including normal temperature, no history of exposure or travel, and no respiratory symptoms.

The general principles in requesting for preoperative/pre-procedural testing for SARS-CoV-2 are :

Patients who are infected with the virus have been reported to have a higher perioperative morbidity and mortality when undergoing surgical procedures.11 Asymptomatic patients may have the potential of transmitting the virus.9 Viral transmission may occur up to three days before patients become symptomatic.12

PRE-OPERATIVE COVID-19 SCREENING AND TESTING

All children scheduled for surgery or other procedures that require general anesthesia, deep sedation or moderate sedation should be screened and tested for SARS-CoV-2. 11,13,14

Pre-operative / pre-procedure symptom screening of COVID-19 will include symptoms and significant exposure.

Symptoms include, but are not limited to, the presence of any of the following: subjective or measured fever, cough, shortness of breath, sore throat, muscle aches, diarrhea, fatigue, nasal congestion, headache, loss of smell, altered sense of taste, new onset of rash.

Significant exposure is history of travel to or residence in an area with local transmission, or exposure to contacts who are confirmed positive for COVID-19 for the past 14 days.15

Patients will then be classified based on the guideline of the Philippine Pediatric Society and Pediatric Infectious Disease Society of the Philippines.15

If the patient is SYMPTOMATIC, non-emergent procedure / surgery should be postponed or cancelled.

If the patient is ASYMPTOMATIC, proceed with COVID-19 testing.

The recommended method of testing for SARS-CoV-2 is detection of SARS-CoV-2 RNA by reverse transcription polymerase chain reaction (RT-PCR) testing.

The reported sensitivity of SARS-CoV-2 testing is approximately 70% to 90%, meaning that up to 30% of infected patients will be reported as free of the virus.16

Clinicians must be mindful that a negative test does not negate the possibility that an individual is infected.

Timing of RT-PCR testing:

Patients should undergo SARS-CoV-2 PCR testing as close to the time of the procedure as possible and preferably done 48 hours prior to the procedure. The Philippine Society of Pediatric Surgeons recommends the surgery be done within 3-7 days when the sample has been obtained, allowing for a delay in turn around-time of the laboratory results. 13

After the patient is tested negative for COVID-19, the patient should remain self-isolated or on home quarantine until the procedure date.17

In local areas, where there is limitation in RT -PCR testing facilities, resumption of elective surgeries is recommended to be delayed until the testing capacity of the country or institution can cater to preoperative testing of patients. 17

Antibody testing does NOT have a role in pre-operative screening and risk stratification. Antibodies develop in the second week of symptoms and not all patients who are infected with SARS-CoV-2 develop detectable antibodies.18

The use of antigen-detecting rapid diagnostic tests is NOT recommended for clinical diagnosis. 18

Radiographic imaging such as chest x-ray and/or chest CT scan is NOT recommended as a screening or diagnostic tool for COVID-19.

In congruence with our previous statement on pre-operative evaluation 19, chest radiograph is NOT a routine test and should be determined by patient indication and procedural needs.

TIMING OF SURGERY

We adopt the recommendations from the Philippine College of Surgeons and Philippine Society of Pediatric Surgeons 13,14 as follows:

Emergent surgeries shall be done even without RT-PCR results.(All patients should be swabbed on admission.)

For urgent and elective surgeries, the following are recommended:

If the patient travelled to a country/locality with sustained community transmission, delay the surgery for 14 days following return, even if asymptomatic.

If the patient has been in direct contact with a confirmed COVID-19 positive patient, delay the surgery for 14 days following last contact, even if asymptomatic.

If the patient presents with influenza-like illness or unexplained cough at the time of the procedure, defer the surgery until they have recovered.

NOTE: Classification and examples of cases of surgery as emergent, urgent and elective is found in the Philippine Society of Pediatric Surgeons Interim Guidelines for Pediatric Surgery During Coronavirus Disease 2019 (COVID-19) Pandemic .13

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