

Letters

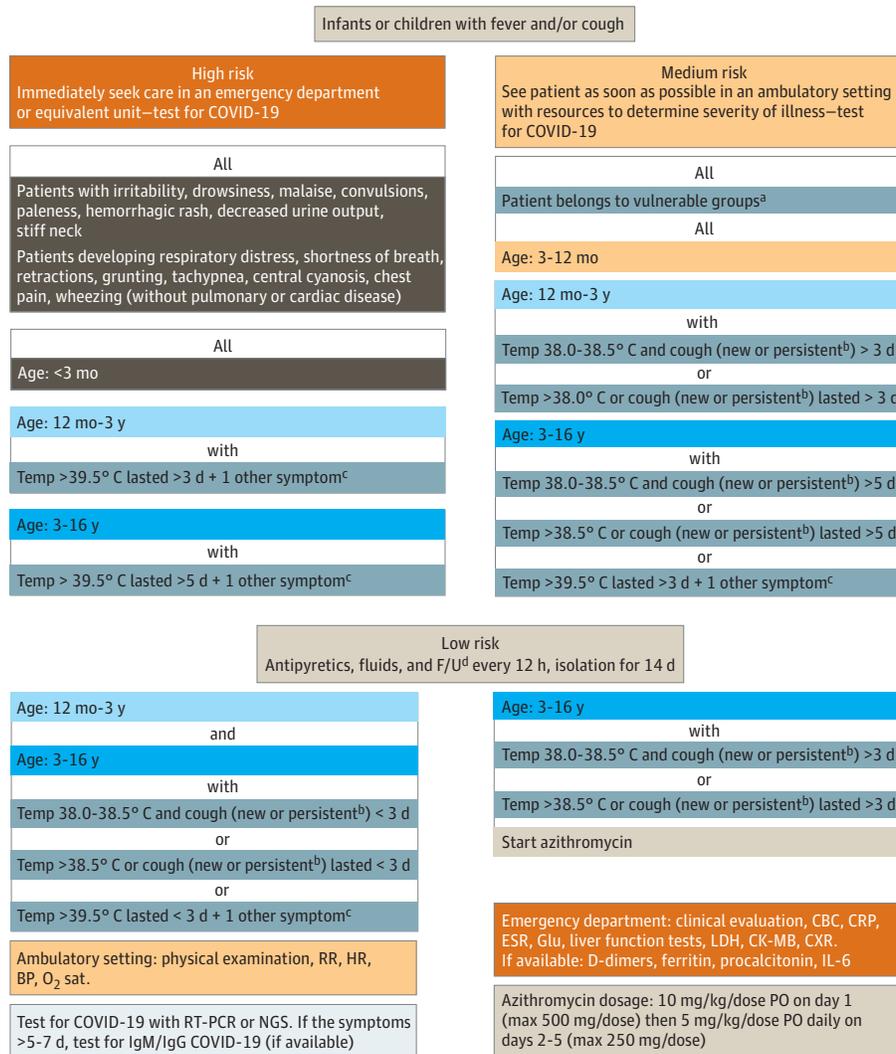
COMMENT & RESPONSE

A Decision-Making Algorithm for Children With Suspected Coronavirus Disease 2019

To the Editor In a Viewpoint, Rasmussen and Thompson¹ emphasize the importance of differentiating potential coronavirus

disease 2019 (COVID-19) from other illnesses and stress that this will be difficult until testing for COVID-19 becomes more broadly available.¹ Furthermore, the US Centers for Disease Control and Prevention and World Health Organization have advised self-isolation for the patients with mild symptoms. Despite the fact that most of the children are asymptomatic

Figure. Decision-Making Process for Children Suspected With Coronavirus Disease 2019 (COVID-19)



The patients are classified according to their risk of developing complication in case of COVID-19 in high-risk, medium-risk, and low-risk individuals. The high-risk patients should be advised to immediately seek care in an emergency department, the medium-risk patients to visit an ambulatory setting, and the low-risk patients to stay home with close follow-up by telemedicine. The reverse transcription-polymerase chain reaction (RT-PCR) test for COVID-19 is recommended only in medium-risk and high-risk patients based on the existing shortage of the test. BP indicates blood pressure; CBC, complete blood cell count; CK-MB, Creatine kinase-MB; CRP, C-reactive protein; CXR, chest radiograph; ESR, erythrocyte sedimentation rate; F/U, follow-up; Glu, glucose; HR, heart rate; LDH, lactate dehydrogenase; NGS, next-generation sequencing; O₂ sat, oxygen saturation; PO, orally; RR, respiratory rate.

^a Other symptoms: diarrhea, fatigue, rhinorrhea, vomiting, sore throat, headache, myalgia, anosmia, ageusia, exposed to a person positive for COVID-19.

^b Vulnerable groups: chronic lung disease, serious heart conditions, immunocompromised including cancer treatment, severe obesity (body mass index >40; calculated as weight in kilograms divided by height in meters squared), other chronic illness, pregnant women or health care worker in household.

^c Cough defined as persistent if more than 3 times every hour.

^d F/U via telemedicine with primary care physician or pediatrician. Advice: in-house isolation for 14 days, disinfectant procedures, parents and children > 4 years to wear mask. Notify the health center prior to patient transfer.

or have mild/moderate illness, there are reasons to remain aware about severe acute respiratory syndrome coronavirus 2 infection in children.²

The major role of pediatric health care clinicians in this pandemic is to assess the severity of the illness in symptomatic patients via telephone triage and video consultations. The literature is lacking specific guidelines for telemedicine evaluation and guidance for who should be tested for COVID-19 and when. We developed a decision-making process (Figure) based on fever and cough, the 2 main symptoms of COVID-19, while considering other symptoms reported in children with COVID-19.³ It has been reported that the prevalence of severe or critical disease was 10.6% in children younger than 1 year while only 4% in older ones.⁴ Hence, the patients are categorized in age groups and the present risk stratification enables clinicians to identify the right level of care. The risk groupings include high-risk, medium-risk, and low-risk individuals. The high-risk group consists mainly of patients with respiratory compromise and/or poor physical performance status; all the symptomatic children younger than 3 months, children younger than with temperature greater than 38.5 °C and cough or temperature greater than 39.5 °C lasted at least 3 days, and older children with symptom duration greater than 5 days. The children with mild symptoms that lasted less than 3 days were classified as low risk and the individuals with underlying illnesses or symptom duration between 3 and 5 days were categorized in the medium-risk group. The high-risk patients should be advised to seek immediate emergency care while the medium-risk groups should be advised to be evaluated in an ambulatory setting. Additionally, the lower-risk patients would be instructed to stay in home isolation with 12-hourly follow-ups, preferably via telecommunication.

The reverse transcription-polymerase chain reaction test for COVID-19 is recommended in medium-risk and high-risk

patients based on the existing shortage of the test. In the medium-risk patients, further laboratory work is advised.⁵ We recommended early introduction of azithromycin for the children 3 years and older with fever and cough that lasted more than 3 days to treat a possible *Mycoplasma pneumoniae* coinfection. It is important for pediatric health care clinicians to follow a decision-making process to promptly evaluate children suspected to have COVID-19.

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