Boletín de Alerta Bibliográfica

COVID-19
Unidad de Desarrollo de la Investigación, Tecnologías y Docencia
SARS-CoV-2 Infection in Children

CORRESPONDENCE

Lu et al.

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As of March 10, 2020, the 2019 novel coronavirus (SARS-CoV-2) has been responsible for more than 110,000 infections and 4000 deaths worldwide, but data regarding the epidemiologic characteristics and clinical features of infected children are limited.1-3 A recent review of 72,314 cases by the Chinese Center for Disease Control and Prevention showed that less than 1% of the cases were in children younger than 10 years of age.2 In order to determine the spectrum of disease in children, we evaluated children infected with SARS-CoV-2 and treated at the Wuhan Children’s Hospital, the only center assigned by the central government for treating infected children under 16 years of age in Wuhan. Both symptomatic and asymptomatic children with known contact with persons having confirmed or suspected SARS-CoV-2 infection were evaluated. Nasopharyngeal or throat swabs were obtained for detection of SARS-CoV-2 RNA by established methods.4 The clinical outcomes were monitored up to March 8, 2020.
The coronavirus disease 2019 (COVID-19) has spread rapidly across the world. With the sharp increase in the number of infections, the number of pregnant women and children with COVID-19 is also on the rise. However, only 19 neonates born to affected mothers have been investigated, and to our knowledge, no information on early-onset infection in newborns has been published in previous studies.
COVID-19 in children: Current status

Mei-Jy Jeng

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Coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), emerged from China in December 2019. The outbreak further exploded in Europe and America in mid-March 2020 to become a global health emergency. We reviewed recent published articles and on-line open messages on SARS-CoV-2-positive infants and children younger than 20 years of age. Symptoms are usually less severe in children than in adults. Twelve critically or mortally ill children were found in the published or news reports before April 6, 2020. Vertical transmission from the mother to her fetus or neonate has not been proven definitively. However, six early-onset (<7 days) and 3 late-onset neonatal SARS-CoV-2 infections were found in the literature. We also summarized the presentations and contact information of 24 SARS-CoV-2-positive children announced by the Taiwan Centers for Disease Control. Early identification and isolation, adequate management, prevention, and vaccine development are the keys to controlling the disease spread. Clinical physicians should be alert to asymptomatic children with COVID-19. Multi-directional investigations are crucial in the global fight against COVID-19.
COVID-19 Diagnostic and Management Protocol for Pediatric Patients

Carlotti APCP, Carvalho WB, Johnston C, Rodriguez IS and Delgado AF

Clinics
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This review aims to verify the main epidemiologic, clinical, laboratory-related, and therapeutic aspects of coronavirus disease 2019 (COVID-19) in critically ill pediatric patients.

An extensive review of the medical literature on COVID-19 was performed, mainly focusing on the critical care of pediatric patients, considering expert opinions and recent reports related to this new disease. Experts from a large Brazilian public university analyzed all recently published material to produce a report aiming to standardize the care of critically ill children and adolescents.

The report emphasizes on the clinical presentations of the disease and ventilatory support in pediatric patients with COVID-19. It establishes a flowchart to guide health practitioners on triaging critical cases.

COVID-19 is essentially an unknown clinical condition for the majority of pediatric intensive care professionals. Guidelines developed by experts can help all practitioners standardize their attitudes and improve the treatment of COVID-19.

Key words: COVID-19; Pediatric Critical Care Medicine; Infection; Ventilatory Support; Diagnostic Criteria

TEXTO COMPLETO
Coronavirus disease (COVID-19) was firstly reported at the end of 2019. The disease rapidly spread all around the world in a few months and was declared a worldwide pandemic by WHO in March 2020. By April 9, there were 1,436,198 confirmed COVID-19 cases in the world, nearly with 6% mortality rate. This novel infectious disease causes respiratory tract illness that may generally occur as mild upper respiratory tract disease or pneumonia. In older patients and/or patients with underlying conditions, it may result in acute respiratory distress syndrome, multi organ failure and even death. According to the current literature, children account approximately for 1%–5% of diagnosed COVID-19 cases in the world, nearly with 6% mortality rate. This novel infectious disease causes respiratory tract illness that may generally occur as mild upper respiratory tract disease or pneumonia. 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In older patients and/or patients with underlying conditions, it may result in acute respiratory distress syndrome, multi organ failure and even death.
Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Children and Adolescents

Riccardo Castagnoli, Martina Votto, Amelia Licari, Ilaria Brambilla, Raffaele Bruno, Stefano Perlini, Francesca Rovida, Fausto Baldanti and Gian Luigi Marseglia

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Registro gratuito en: https://jamanetwork.com/

Key Points

Question  What are the clinical features of pediatric patients with coronavirus disease 2019 (COVID-19)?

Findings  In this systematic review of 18 studies with 1065 participants, most pediatric patients with SARS-CoV-2 infection presented with fever, dry cough, and fatigue or were asymptomatic; 1 infant presented with pneumonia, complicated by shock and kidney failure, and was successfully treated with intensive care. Most pediatric patients were hospitalized, and symptomatic children received mainly supportive care; no deaths were reported in the age range of 0 to 9 years.

Meaning  Most children with COVID-19 presented with mild symptoms, if any, generally required supportive care only, and typically had a good prognosis and recovered within 1 to 2 weeks.

TEXTO COMPLETO

Late-Onset Neonatal Sepsis in a Patient with Covid-19

CORRESPONDENCE
COVID-19 CASES

Coronado et al.

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A 3-week-old boy presented with a 2-day history of nasal congestion, tachypnea, and reduced feeding. He was born at 36 weeks of gestation to a 21-year-old woman (gravida 3, para 1) who had received antenatal treatment for carriage of group B streptococci. He had previously received a 48-hour course of antibiotics for suspected neonatal sepsis because of a fever (temperature, 38.5°C), but the workup for sepsis was negative, and he was discharged home.

On admission to the pediatric intensive care unit, the temperature was 36.5°C, the pulse 150 beats per minute, the blood pressure 80/50 mm Hg, and the respiratory rate 40 per minute. His oxygen saturation was 97% while the patient was breathing room air. Chest radiography showed blunted linear structures and consolidation in the right upper lobe (Fig. 1A). Progression and improvement manifested by clearing and degranulation were noted, and the patient was transferred to a pediatric hospital.

On transfer, the patient had hypoxemia, tachypnea, tachycardia, and diaphoresis. Despite initial interventions, hypoxemia persisted, and he was transferred to a pediatric ICU in a state of respiratory compromise. The patient underwent surgical intervention, and after several days of hospitalization, he was transferred home.

Evaluación en condiciones de campo de una prueba serológica rápida para detección de anticuerpos IgM e IgG contra SARS-CoV-2


Revista Peruana de Medicina Experimental y Salud Pública 2020;37(2).
En línea: 22/04/2020

Objetivos. Determinar el rendimiento diagnóstico adicional de una prueba serológica rápida que detecta anticuerpos IgM e IgG contra SARS-CoV-2 en relación a la reacción en cadena de polimerasa reversa en tiempo real (RT-PCR). Materiales y métodos. Se realizó un estudio transversal incluyendo pacientes hospitalizados por COVID-19 en tres hospitales, trabajadores de salud expuestos a la infección y pacientes ambulatorios que cumplían criterios de caso sospechoso, a quienes se les realizó la prueba molecular (RT-PCR) y la prueba serológica rápida. Se evaluó el rendimiento diagnóstico adicional de las prueba serológica rápida en relación a la molecular. Asimismo, se realizó la estimación de sensibilidad y especificidad de dichas pruebas. Resultados. Se incluyeron 144 personas. La prueba serológica rápida obtuvo un 19,4% de resultados positivos en comparación con un 11,1% en la prueba molecular (p=0,03). La prueba serológica rápida detectó 21 casos que habían resultado negativos por el RT-PCR inicial y el rendimiento diagnóstico adicional fue de 56,8% en comparación al RT-PCR. El rendimiento diagnóstico adicional fue 50,0% durante la primera semana, 70,0% durante la segunda y 50,0% durante la tercera semana de inicio de síntomas. La sensibilidad de la prueba serológica rápida fue de 43,8% y la especificidad del 98,9%. Conclusiones. La prueba serológica rápida logró detectar un mayor número de casos respecto a la molecular, sobre todo a partir de la segunda semana de inicio de síntomas. Además, presentó una alta especificidad. Los resultados mostrarían su utilidad como prueba complementaria a la prueba molecular, especialmente durante la segunda y tercera semana de enfermedad.
Recursos de Información:

ASOCIACIÓN ARGENTINA DE MEDICINA RESPIRATORIA

Covid-19

AMERICAN THORACIC SOCIETY (ATS)
Covid-19

https://www.thoracic.org/covid/index.php
ASOCIACIÓN LATINOAMERICANA DEL TÓRAX (ALAT)

Covid-19

https://alatorax.org/es/covid-19
BRITISH THORACIC SOCIETY (BTS)
Covid-19
