Global survey reveals that few children with rheumatic disease report contracting COVID-19
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Results from a large, international survey shows that only a small fraction of children with rheumatic diseases reported contracting COVID-19. Those who did become infected with COVID-19 all had benign outcomes and did not develop significant complications, despite the fact that most children were taking immunosuppressive medications. The research was presented at ACR Convergence, the American College of Rheumatology's annual meeting (ABSTRACT #1685).

The most common pediatric rheumatic disease is juvenile idiopathic arthritis (JIA), which is a group of chronic conditions that cause arthritis (joint swelling and inflammation) affecting children and teenagers. JIA may involve one or many joints, may also affect the eyes, and cause other symptoms, such as fevers or rash.

As the COVID-19 pandemic surged worldwide in early 2020, the risk of COVID-19 and serious complications or death was unknown for children with rheumatic diseases. Many of these patients are treated with immunosuppressive medications that leave them more susceptible to infections.

"At the time, parents and physicians did not know whether to continue a child's immunosuppressive medications to prevent COVID-19 and related complications," says the study's co-author, Jonathan S. Hausmann, MD, Instructor in Medicine at Harvard Medical School and a pediatric rheumatologist at Boston Children's Hospital.

To learn more about the impact of COVID-19 on children with rheumatic diseases, Dr. Hausmann and his fellow researchers analyzed data from the international COVID-19 Global Rheumatology Alliance Patient Experience Survey, a global patient registry. They sent surveys to parents of children with rheumatic diseases through patient support organizations and social media. Parents provided information on their child's rheumatic disease diagnosis, medications, whether or not the child ever developed COVID-19 and any outcomes they experienced if they were infected.

The study collected data from April 3 to May 8, 2020 and includes 427 children under age 18. Most of the children in the study lived in the Americas, and were white, female and between 5 and 14 years old. Most had JIA, and they were taking either conventional synthetic or biologic disease-modifying antirheumatic drugs (DMARDs). Both classes of drugs suppress the immune system and help to control the arthritis, while also making children at increased risk of infection. The survey also included children with other pediatric rheumatic diseases such as lupus, dermatomyositis, and autoinflammatory diseases.

Among the 427 children in the study, only five, or 1.2%, were diagnosed with COVID-19, none of whom required hospitalization or had severe outcomes. Because the study is based on self-

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reported responses from parents who were engaged in social media or who were willing to fill out a survey, it may not fully represent all children with pediatric rheumatic diseases, and it may be more likely to include a healthier population, the researchers say.

"These findings are important as policymakers and educators contemplate reopening schools with the pandemic still ongoing, and with parents and physicians struggling to make decisions of whether to send their children back to school," says Dr. Hausmann. "Our study suggests that children with rheumatic disease should continue their immunosuppressive drugs during the pandemic, as it does not appear to place them at increased risk of COVID-19 related complications. Our findings support the recent ACR guidelines for managing immunosuppression during the pandemic."

Next, this research group plans to develop a prospective, international registry of people with rheumatic disease of all ages to assess long-term outcomes of the COVID-19 pandemic, explore the willingness to receive and assess the efficacy of a vaccine, assess the impact of the environment on COVID-19, and track the effects of the pandemic on the physical and mental health of participants over time, he adds.

More information: acrabstracts.org/abstract/impa ... om-around-the-globe/

Provided by American College of Rheumatology

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