

Disease severity factors ID'd for human rhinovirus

January 13 2014



(HealthDay)—Human rhinovirus (HRV) infection is a common pathogen seen in young children with respiratory infection symptoms, with severe disease caused mainly by presence of respiratory syncytial virus (RSV) in coinfections, prematurity, congenital heart disease, and noninfectious respiratory disease, according to a study published online Jan. 13 in *Pediatrics*.

Lourenço Faria Costa, Ph.D., from the Instituto de Ciências Biomédicas in Uberlândia, Brazil, and colleagues retrospectively evaluated HRV infection using nasopharyngeal aspirates from 434 children aged up to 5 years. The children presented with a broad range of respiratory infection symptoms. The authors assessed the presence of HRV and eight other [respiratory viruses](#), as well as host risk factors.

The researchers detected HRV in 41.7 percent of samples, in 107 samples as the only agent and in 74 samples as coinfections, mainly with RSV (43.2 percent). Moderate-to-severe symptoms were seen with 28.9 and 51.3 percent of the single and coinfections, respectively ($P = 0.004$). Coinfections were associated with lower respiratory tract symptoms and with some disease severity parameters, such as hospitalization. RSV was the most important virus associated with severe disease in coinfections. Comorbidities associated with disease severity included prematurity, cardiomyopathies, and noninfectious respiratory diseases ($P = 0.007$).

"Our study showed that HRV was a common pathogen of respiratory disease in children and was also involved in severe cases, causing symptoms of the [lower respiratory tract](#)," the authors write.

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Citation: Disease severity factors ID'd for human rhinovirus (2014, January 13) retrieved 27 April 2024 from
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