Clinical description of human bocavirus viremia in children with lower respiratory tract infection, eastern province, Saudi Arabia

Sir,

Bubshait *et al*. addressed in their interesting study that the clinical picture of human bocavirus (HBoV) infection ranged from mild to severe disease as one of them required admission to Intensive Care Unit.[1] I presume that the picture could not precisely elucidate the clinical spectrum of HBoV infection in children with lower respiratory tract infections in Kingdom of Saudi Arabia (KSA). Hence, it should be cautiously interpreted. This is based on the following five points:

1. The size of the study population with HBoV infection was small ($n = 5$).
2. The study was conducted in a single center.
3. A high viral and bacterial prevalence rates and distinct bacterial-bacterial, viral-bacterial, and viral-viral associations have been noticed to be present in healthy children, hinting toward the complexity and potential dynamics of microbial communities in the upper respiratory tract. This warrants careful consideration when associating microbial presence with specific respiratory diseases.[2] In Bubshait *et al*.'s study, among five patients with HBoV viremia, one had a concomitant positive respiratory syncytial virus in the nasopharyngeal aspirate. Such viral co-infections might increase the severity of the clinical picture and the risk for hospital admission.
4. The clinical presentation of HBoV infection depends on both viral load and the particular interaction between the host and virus. Viral loads are determined by quantitative real-time polymerase chain reaction in HBoV positive samples. A direct correlation of high viral load with increasing HBoV disease severity has been noticed.[3,4] It was not obvious whether Bubshait *et al*.[1] has considered in their study that correlation between viral load and HBoV infection severity.
5. HBoV has been detected in healthy children but with a significantly lower frequency than in ill-children.[5]

Considering the aforementioned remarks, there is a need to conduct large-scale multi-centers studies to better elucidate the clinical spectrum of HBoV infection as well as genome sequence analysis to get more data on the genotypic variation and molecular evolution of HBoV in KSA.

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Conflicts of interest
There are no conflicts of interest.

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