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Tomato Flu in the Time of COVID-19: Another Challenge for the Indian Health System

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Abstract

Just as the country has recently dealt with the increase in COVID-19 and monkey pox cases, another dark cloud of "Tomato flu/ Tomato fever" loomed the skies of the nation. As of 24 august, 2022, 100 kids mainly below the age of 5 have been reported showing symptoms of the flu. Another state of Odisha, suspected similar infectious etiology in 36 cases out of which 26 Children were below the age of 10. This endemic viral illness has triggered an alert to the neighboring states of Tamil Nadu and Karnataka, along with the entire nation at large. The wrath of this disease is not just restricted to India but crossing borders. Tang, et al reported a case of a 13-month-old female child and her 5-year old brother based in United kingdom with similar etiology. Through this report, we aim to alert the frontline pediatricians, who are most likely to come across and manage such daunting cases with these non-specific clinical features in their routine clinical practice across the globe. Early and extreme preventive and surveillance measures must be undertaken to prevent substantial loss in public and private sector

Keywords
- COVID 19
- Health burden
- HFMD
- India
- Tomato flu

Just as the country has recently dealt with the increase in COVID-19 and monkey pox cases, another dark cloud of "Tomato flu/ Tomato fever" loomed the skies of the nation.[1] In recent times, Haryana, Kerala, Tamil Nadu and Orissa in India have encountered a rampant rise in Tomato flu cases in children less than 5 years[2] Though this scarce viral infection is deemed non-fatal, yet a watchful surveillance is required to prevent future outbreaks in India, considering the later a developing nation with previous dreaded complications of the COVID-19 pandemic.[2]

Earlier, such cases appeared in 2007 in Kerala with wide regions being affected at that time. In the present scenario, it was first recognised in the Kollam region of Kerala on May 6, 2022. As of August 24th, 2022, more than 100 kids below the age of 5 years have been reported with symptoms of the flu.[3] The disease has forewarned the neighbouring states of Karnataka and Tamil Nadu, along with the entire nation at large. Precautionary measures have been adopted by various Health Departments to monitoring and prevention of the viral infection in other parts of India. The wrath of this disease is not just restricted to India but crossing borders. Tang, et al reported a case of a two sibling children based in United kingdom who tested positive one week after returning from Kerala in May 2022.[4]

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The anonym "tomato flu" and/or "tomato fever" has been given to the disease because of the resemblance of lesion with red bullous blisters. Typical manifestations are non specific symptoms like fever, malaise, myalgia, blisters on the skin, rashes, fatigue and dehydration. The viraemia can last for many weeks even after the clinical symptoms have abated.[5] Despite similarity in the symptomatology, tomato fever virus is not related to SARS-CoV-2;, and its aetiology still remains a mystery as some researchers believe that the symptoms could be related to Chikungunya or dengue fever in children rather than a viral infection.[2] The virus has also been postulated to be an emerging variant of hand, foot and mouth disease (HMFD), an infectious disease targeting mainly young children between 1–5 years of age and immunodeficient adults.

The proposed treatment still remains similar viz., isolation, rest, hydration, lukewarm water application in order to relieve irritation and rashes, NSAIDs and other symptomatic support.[2,5]

Through this report, we aim to alert the frontline paediatricians, who are most likely to come across and manage such daunting cases with these non-specific clinical features in their routine clinical practice across the globe. Finally, efforts should be focused on early identification, isolation, care and prevention.

Conflict of Interest
None declared.

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