







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

Vibha Mehta<sup>1</sup> J. S. Rahul<sup>2</sup> Harsh Vardhan Shukla<sup>3</sup> Khushboo Pandey<sup>4</sup>

J Lab Physicians 2023;15:472-473.

Address for correspondence Khushboo Pandey, MBBS, MD, DNB, DM, Department of Onco-Anaesthesia and Palliative Care, HCG Cancer Centre, Ahmedabad 380060, India (e-mail: khushboo0411@gmail.com).

## **Abstract**

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

Just as the country has recently dealt with the increase in COVID-19 and monkey pox

## **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.<sup>1</sup> 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<sup>2</sup> 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.<sup>2</sup>

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.<sup>3</sup> 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

article published online March 6, 2023

DOI https://doi.org/ 10.1055/s-0043-1761927. ISSN 0974-2727.

© 2023. The Indian Association of Laboratory Physicians. All rights reserved.

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial-License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (https://creativecommons.org/ licenses/by-nc-nd/4.0/)

Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

<sup>&</sup>lt;sup>1</sup> Department of Clinical Microbiology, Amrita School of Medicine, Faridabad, Haryana, India

<sup>&</sup>lt;sup>2</sup>Department of Neuroanaesthesia, Amrita School of Medicine, Faridabad, Haryana, India

<sup>&</sup>lt;sup>3</sup>Department of Head and Neck Onco-surgery, HCG Cancer Centre, Ahmedabad, India

<sup>&</sup>lt;sup>4</sup>Department of Onco-Anaesthesia and Palliative Care, HCG Cancer Centre, Ahmedabad, India

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.<sup>5</sup> 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.<sup>2</sup> 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.<sup>2,5</sup>

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.

## References

- 1 Bhattacharya M, Dhama K, Chakraborty C. Recently spreading human monkeypox virus infection and its transmission during COVID-19 pandemic period: A travelers' prospective. Travel Med Infect Dis 2022;49:102398
- 2 Chavda VP, Patel K, Apostolopoulos V. Tomato flu outbreak in India. Lancet Respir Med 2023;11(01):e1-e2
- 3 Tomato-flu, new viral infection, reported among children in Kerala. https://www.thestatesman.com/india/tomato-flu-viralinfection-kerala-1503102227.html
- 4 Tang JW, Barer MR, Iqbal A, et al. Kerala Tomato Flu A Manifestation of Hand Foot and Mouth Disease. Pediatr Infect Dis J 2022; 41(11):e501-e503
- 5 Mukherjee D, Ruchika FNU, Pokhrel NB, Jaiswal V. Tomato fever and COVID 19, a double hit in the Indian health system. Immun Inflamm Dis 2022;10(08):e677