

UNCOVERING THE TRUTH ABOUT TOMATO FLU

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ABSTRACT

Tomato flu is an infectious disease caused by a virus of unknown origin. The main symptoms of the disease are tomato-like blisters all over the body that grow into a tomato-shaped rash, hence the name tomato flu. It mainly affects children only. Tomato flu is often referred to as "hand, foot and mouth disease". Clinical manifestations are mild in most cases. This is a self-limiting disease. Will decide in 7-10 days. Diagnosis is based on clinical history and physical examination, especially in the areas of infection. The etiological agent of this infectious disease, its treatment method and vaccination methods are unknown, and this is an important area for research. With the re-use of drugs and vaccines, Covid-19 has taught us a lesson in outbreak preparedness and emergency case management, similar to trying to contain this disease in its current state.

KEYWORDS: Rashes, clinical features, coxsackievirus A16, hand, foot and mouth disease, rash, "tomato flu", CA-16, HFMD.

INTRODUCTION

Tomato flu is a self-limiting disease and there is no specific treatment for it. Tomato flu was first detected in Kollam district of Kerala on 6 May 2022, and as of 26 July 2022, more than 82 children under 5 years of age have been reported by the government hospital.^[1] Other affected districts in Kerala include Anchal, Ariyankavu and Nduvathur. This deadly disease is causing alarm and panic in the neighboring states of Tamil Nadu and Karnataka. Also, 26 children (age 1 to 9 years) were reported dead in Odisha by the Regional Medical Research Centre, Bhubaneswar. Till date, apart from Kerala, Tamil Nadu and Odisha, no region of India has been affected by the disease. However, the Kerala Health Department is taking

preventive measures to monitor the spread of the virus and prevent it from spreading to other parts of India. The initial symptoms seen in children with tomato flu are similar to those of chikungunya, including high fever, swelling, and severe joint pain.^[2] Tomato flu gets its name from the rash of red, painful blisters all over the body that grow to the size of a tomato. These blisters are similar to those seen with the monkey virus in young people.^[3,4] The skin can also be affected by tomato flu. As with other viral infections, symptoms include fatigue, nausea, vomiting, diarrhea, fever, thirst, joint swelling, body aches, and flu-like symptoms similar to dengue fever.^[5] In children with these symptoms, molecular and serological tests are performed to diagnose dengue, chikungunya, Zika virus and Vercella-zoster virus and herpes.^[6]



After the eradication of these viruses, the reduction of the tomato virus is confirmed. Because tomato flu is similar to chikungunya and dengue, including hand, foot and mouth disease, the treatment is the same, ie isolation, rest, plenty of water and hot water sponges to relieve heat and swelling.

Epidemiology

The outbreak began in the Kollam district of Kerala, where 82 cases of tomato flu have been reported since 13 May 2022, and the number is expected to rise. A four-year-old boy from Ariyankavu, a village near the Kerala-Tamil Nadu border, became the first case of tomato flu on May 6, 2022.^[7] Since then, 26 positive cases of hand, foot and mouth disease have been reported in Orissa, believed to be tomato flu.^[8]

Clinical features

Tomato flu can be caused by chikungunya or dengue due to their similar symptoms, although the relationship has not been proven.^[9]

Symptoms of tomato flu**Common symptoms seen so far include the following**

- Large, round, red blisters on parts of the body
- High fever
- Dehydration
- Rash and irritated skin
- Myalgia
- Swelling and joint pain

Other unusual symptoms include

- I. Nausea and vomiting
- II. Runny nose
- III. Sneezing
- IV. Constant coughing
- V. Spots and discoloration on parts of the body, including hands, hips and knees
- VI. Abdominal pain and belching
- VII. Fatigue

Tomato flu is not a serious illness. Complications and death are rare.^[10]

Treatment

Treatment for tomato flu is to stay hydrated, get plenty of rest and sleep. It is important not to break the bubbles. People are advised to wait until symptoms subside, which could take up to ten days to resolve. Your doctor may prescribe symptomatic treatment for fever, body aches, skin rash, etc. Stay in isolation so you don't infect others. If new symptoms appear or existing symptoms worsen, you should consult a doctor.

Prevention of Tomato Flu

Tomato Flu is an infectious disease. As they say, prevention is better than cure. Therefore, we must:

1. Practice good hand hygiene
2. Keep your environment clean
3. Teach your children good hygiene, such as using a tissue when they sneeze or cough and washing their hands
4. Separate dishes, clothes and beds with cleaning regularly.

5. Avoid contact with infected people
6. Eat good food to maintain and strengthen the immune system.
7. Get plenty of rest and sleep.
8. Medicines and vaccines are under trial

Tomato flu is a new infectious disease, so no drugs or vaccines have been developed or are in clinical trials.

Steps taken by the government

In response to the discovery of Tomato flu cases in Kerala, Tamil Nadu has increased surveillance near its border. Programs have been initiated by the Kerala government in all health centers and Angadwadi to treat the affected people.^[11]

The Anganwadi centers in Coimbatore are conducting health screening by 24 mobile teams of deployed health workers.^[12] Three teams of tax inspectors, medical inspectors and police officers have been assigned to check people suffering from fever.^[12] Since most of the cases are from Kerala, close attention will be given to nearby areas.^[19] Outpatient departments of all hospitals in neighboring countries should report those showing symptoms of tomato flu.^[13]

Etiology of tomato flu

Origin of tomato flu A report has been published on the laboratory findings of children with tomato flu and a history of travel to England. Where they had played with a kid who had recently contracted 'tomato flu'.^[14] A week after returning, the 13-month-old girl and her 5-year-old brother developed a rash consisting of small fluid-filled blisters with no other symptoms.^[14] According to research by Julian Tang at the University of Leicester in the UK and his colleagues, the children were infected with the coxsackie virus, which is the cause of HFMD.^[14] It is likely that HFMD, a common and typically mild illness in children, is causing the so-called tomato flu in India.^[14] On that note, the name 'tomato flu's a misnomer because coxsackievirus, a member of the enter virus family, are unrelated to influenza viruses and have no connection to plants.^[14] Some of the diseases are believed to be caused by the mosquito-borne dengue and chikungunya viruses.^[14] However, the symptom that gave rise to the term "tomato fever", painful red blisters filled with fluid, is not a symptom of dengue or chikungunya.^[14] In another context, some doctors in Kerala believe that this is a new disease.^[14] But according to Tang, the same disease causes different rashes.^[14] In addition, new strains of enteroviruses from China have recently spread to the world, so the nature of

these new strains may vary.^[14] Coxsackieviruses A-6 and A-16 are the main causes of current HFMD cases in India, and HFMD cases are reported to have increased since children were allowed back to school. during the lifting of the covid-19 lockdown.^[15] Another cause of the disease is enterovirus 71, which is rare at this time. Part of the experience from the response to the outbreak of covid-19.^[15]

Recommendation

Like other influenza stains, tomato flu is extremely contagious.^[16] Therefore, it is essential to properly isolate known or suspected cases for 5-7 days after symptom onset and take additional preventive measures to stop the tomato flu virus from spreading to other regions of India.^[16] The most effective and economical methods for protecting the public from viral infections, particularly in children, the elderly, immunocompromised individuals, and those with underlying medical conditions, are drug repurposing and immunization.^[16] Tomato flu cannot yet be treated or prevented with antiviral medications or vaccinations.^[16] And to understand the need for prospective treatments, additional follow-up and monitoring for significant outcomes and sequelae are required.^[16] The investigations should be timely made to take action in the event of an outbreak.^[15] Any samples of the respiratory, fecal, or cerebrospinal fluid (in cases of encephalitis or brain inflammation) must be taken within 48h of the disease.^[15] Such time restrictions do not apply to skin-scraping samples or lesions that are being biopsied.^[15] The greatest method of prevention is maintaining good hygiene, sanitizing the immediate area, and keeping the infected child from sharing toys, clothes, food or similar objects with other children who are not ill.^[16,17] The centers advisory to the state, which was released on Tuesday, emphasized adequate preventive measures in infants.^[15] According to advice, anyone who exhibits symptoms of the infection should stay isolated for 5-7 days.^[15] Kids should be warned about the infection and told to avoid hugging or touching kids who have fevers or rashes.^[15] If the child shows symptoms, it should be isolated, the tools, clothes and bedding must be removed at all times, water should be provided and the blisters should be washed. washed with warm water.^[15,18] Parents should urge their kids to practice good hygiene, avoid thumb or finger sucking, and use a napkin if they have a runny nose.^[15] Conflicts on interest: not declared.



CONCLUSION

The Indian epidemic of "tomato flu" with large red bumps on the arms, legs and buttocks was later determined to be caused by the CU-A16 strain. Therefore, the term "tomato" is no longer used and is known as another outbreak of HFMD. In combination, preventive measures such as hygiene and hygiene are important, and it is important to isolate for 5-7 days after exposure to prevent infection and prevent spread out. Although there is no antiviral treatment for HFMD, acyclovir and seltamivir are effective in reducing the severity of symptoms, and the use of immunoglobulins is indicated. In HFMD, it has been shown to increase the time to clinical treatment and reduce the risk. There are 3 licensed vaccines against HFMD, but they are only effective against EV-ATL. Therefore, the development of multiple vaccines against the virulent causes of HFMD, including CV-A16, is the most effective way to prevent it.

Conflicts on interest: Not declared.

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