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## Hand-Foot-Mouth Disease in an Immunocompetent Adult- An Atypical Case

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**Type of Publication:** Case Report

**Conflicts of Interest:** Nil

### Abstract

We herein report a case of Hand-Foot-Mouth disease in an immunocompetent adult. The case was atypical and contrary to the regular epidemiological pattern. The features of the case, the diagnosis of the disease and its subsequent successful treatment are discussed. The case report ends with a discussion about the need for vigilance and preparedness in tackling what may prove to be the vanguard of a changing trend.

**Keywords:** vigilance, preparedness, HFMD

#### Introduction

Hand, foot, and mouth disease (HFMD) is a common enteroviral infectious disease caused mainly by Coxsackie A16 and enterovirus 711[1]. Robinson and co-workers first reported it in Canada in 1957[2]. It occurs as an endemic or epidemic disease in North America [3] and Europe [4] but is increasingly prevalent

in South-East Asia [5], including India. It is characterised by skin rash and oral lesions accompanied by flu-like symptoms. It mainly affects infants [6] but may be seen in immunocompromised adults [7]. Atypical cases have also been reported in immunocompetent adults [8].

In India, it was first reported in Calicut around 2003[9]. Four years later, a large-scale outbreak was reported in West Bengal [10].

The severity of the infection is determined by several factors such as virological, host and environmental factors.

#### **Case Presentation**

A thirty-two-year-old man came to the dental clinic for treatment. He complained of severe sore mouth and throat. He also reported malaise and abdominal discomfort. He reported no harmful habits. He was immunocompetent. Upon examination, he was found to have a fever of 39°C. Crusted red-ringed blisters and ulcers were evident on the tongue, hand, and foot. An itching rash was present on the palms of the hands and the soles of

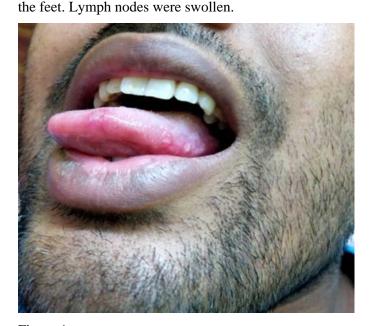


Figure 1



Figure 2



Figure 3

# **Diagnosis**

Based on clinical examination and lab reports, he was diagnosed with hand-foot-mouth disease.

## **Differential Diagnosis**

Herpetic gingivostomatitis, herpangina, erythema multiforme, recurrent aphthous ulcers, and animal footand-mouth disease as possible differential diagnoses

## Treatment

Since the infection is usually self-limiting and subsides within 7-14 days, treatment was mainly supportive.

Patient was prescribed

- Taxim-O 200 twice per day before meals for 5 days
- Acivir DT 400 twice per day before meals for 5 days
- Fluconazole 150 for 10 days
- P650 twice per day for 5 days
- Pantoprazole once per day before meals for 10 days.
- Complevit Gold capsules once per day for 30 days.

The patient was asked to complete the regimen and report for a follow-up after 30 days.

## Follow-up

After treatment, the patient showed substantial improvement. During the recall after one month, Blisters were treated on the mouth, hand and foot. Intraoral lesions were healed.



BEFORE



# Figure 4 **Discussion**

Hand Foot Mouth Disease has traditionally been considered a disease of infants and endemic in North America. The manifestation of this disease in an adult in West Bengal state of India is certainly an arresting incident. This could be the vanguard of a growing trend. Given that oral symptoms are common, dental professionals must be sufficiently familiar with the clinical manifestations of HFMD to ensure early diagnosis and treatment, which in turn determines the prognosis and course of the disease.

The disease is self-limiting in nature. Treatment is mainly symptomatic and carried out under the following principles. Standard dosages of antipyretics agents like Acetaminophen, ibuprofen for fever and analgesia. Lidocaine or benzocaine is applied with a cotton swab to specific areas to avoid toxicity. Betadine mouth rinse may be advised to combat secondary infection. B-complex & Electrolyte Zinc supplements improve nutrition and recovery.

We hope this early report will help strategic planning for better management of the disease and prevention of dreaded complications not just in West Bengal but globally.

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