

Case Report

Hand, Foot and Mouth Disease - A Short Case Report

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A B S T R A C T

Hand, foot and mouth disease, which was once considered a disease of cattle, has been emerging as a common human childhood disease in the last few years but is rare in adults. It is a viral disease characterised by a brief febrile illness and typical vesicular rashes. In rare cases, patients may also develop neurological complications. This report describes a case of hand, foot and mouth disease, presented with typical clinical features in the central Indian region.

Keywords: Hand, Foot and Mouth disease, Viral Lesions, Blisters

Introduction

Hand, foot and mouth disease (HFMD) is a common childhood disease characterised by a brief febrile illness, typical vesicular rashes on the palms, soles, or buttocks, and oropharyngeal ulcers. It is rarely seen in adults. Very rarely the patients may also develop neurological complications, such as encephalomyelitis, aseptic meningitis, and acute flaccid paralysis. The most common aetiological agents are coxsackievirus A6, A16, and enterovirus type 71.^{1,2}

Here we report a case of a 16-year-old male who presented with typical features of HFMD.

Case Report

A 16-year-old male boy presented to the hospital with the complaint of difficulty in eating in the last 8 days. History revealed the presence of one episode of fever 8 days back, associated with malaise, anorexia, and rash over hand, foot, and mouth since then. The patient had fever which

was followed by a typical rash as described and shown in pictures. In the beginning, he noticed papules over hand, sole and mouth and perioral region, which were followed by blisters and then scarring. It was associated with severe itching.

He gave a history of a similar rash followed by fever 2 years back which healed completely after taking symptomatic treatment from a doctor.

On examination, the patient was afebrile. Many papules were noted on the palm, foot, and oral cavity over the palate (Figures 1 and 2). Intraoral examination revealed multiple reddish papules and blisters measuring approximately 2 to 5 mm in diameter on the roof of the hard palate. No other lesions were present intraorally. Based on the clinical features, the case was diagnosed as hand, foot and mouth disease.

The patient was advised plenty of oral fluids to maintain hydration and was prescribed a topical local anaesthetic

for intraoral application, antihistamine to reduce itching, and calamine lotion for topical application.

After two days, most of the papules had turned into fluid-filled blisters. However, palatal lesions had subsided improving the patient's ability to take food. Vesicles started forming crustations in a week and the skin returned to normal in a month.



Figure 1. Crustations seen in Perioral Region



Figure 2. Blisters over Hand and Foot Region

Discussion

HFMD is a common, usually mild childhood illness caused by enteroviruses. Over the last five years, coxsackievirus A6 has been identified as a causative agent in outbreaks in Europe, South-East Asia, and America.³ HFMD was first reported in New Zealand in 1957. Coxsackievirus A16 was first identified next year in 1958 in Canada. HFMD has been considered to be a benign disease of self-limiting nature.⁴ The term HFMD derives from typical maculopapular or vesicular lesions involving the skin of the hands, feet, and oral mucosa. A prodromal phase, including low-grade fever, malaise, and sore throat is commonly observed.⁵

HFMD is characterised by the sudden appearance of erythematous papulovesicular eruptions. Vesicles are round or oval. Generally, they appear in crops and persist in groups over some specific areas like hand, feet, perioral area, knees, buttocks, and also intraorally. Lesions in thick skin like the palms and soles may not develop classical vesicles; they may instead persist as erythematous papules. The disease usually improves spontaneously after 7-10 days without any complication. In severe disease, cardiorespiratory and neurological involvement may be observed.

HFMD is generally easily diagnosed on clinical grounds. Although, this shares some clinical resemblance with other diseases like varicella-zoster, papular urticaria, impetigo, and pompholyx, the constellation of features is unique enough to aid instant clinical diagnosis with certainty in almost all

cases. Most attempts to isolate the virus have been inconclusive in past. There is neither an effective antiviral therapy nor an effective vaccine available against the disease. It is a contagious disease and has the potential to spread very fast over a large population in the community.⁴ Treatment for HFMD is mainly symptomatic. Antipyretics are given to control fever and antihistamines to reduce itching. Topical local anaesthetics can be prescribed for oral ulcers to improve patients' ability to consume a routine diet.

Prevention of further spread of the disease is the only way to control it from becoming a large outbreak. As the organisms are enterovirus, they spread through the faeco-oral route. Strict implementation of basic protocols like monitoring the cleanliness of hands, utensils, and drinking water, and avoiding direct contact with affected people can be rewarding. Restriction of the affected children from attending school or other outdoor activities is a very simple but effective strategy.⁴

Conclusion

HFMD has been emerging as a common human childhood disease in the last few years. The incidence of this disease increases every year. Though in most of the cases, it is non-fatal, there are some reported cases of complications seen in HFMD patients. All dentists, paediatricians and dermatologists should be aware of the clinical features of this disease and possible complications.

Conflict of Interest: None

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