

## Atypical clinical finding of a common pediatric disease in a 5-year-old-child

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### Abstract

Although the classic cutaneous findings of Hand-Foot-And Mouth Disease (HFMD) are well-recognized by pediatricians, atypical skin lesions with coxsackie virus are sometimes challenging. Here, we describe a 5-year-old-child presenting with an atypical cutaneous finding of HFMD.

### Keywords

Hand-foot-and mouth disease; Coxsackievirus; Bullous lesions.

### Abbreviations

HFMD: Hand-foot-and mouth disease; ED: Emergency department; CVA6: Coxsackievirus A6.

### Introduction

Hand-Foot-And Mouth Disease (HFMD), a common viral disease in infants and young children, largely relies on clinical manifestations for early diagnosis, including papulo-vesicular rashes on hands, feet, and ulcerative lesions in the mouth [1]. HFMD cases with atypical cutaneous involvement (vesiculobullous lesions, eczema coxsackium, Gianotti Crosti-like eruption, petechial/purpuric rash, and delayed cutaneous findings of onychomadesis and palms and soles desquamation) have been reported [2-5]. The mechanism of these eruptions is unknown. They are generally self-limited [5,6].

### Case Presentation

5-year-old-child presented to Emergency Department (ED) with a chief complain of fever, mouth sores, painful rash, and poor oral intake for 5 days. No recent history of travel, antibiotic exposure, or sick contacts. Immunization was up-to-date. In the ED, he was nontoxic appearing with a temperature of 38.5°C, Heart rate of 130 beats/min, Blood pressure of 100/68mmhg, respiratory rate of 22 breaths/

min, and oxygen saturation of 100% on room air. On physical examination, the lower lip was swollen with sloughing of mucosa and vesicular lesions with inflamed and ulcerated lesions on the anterior gingiva and tongue. There were two circular, small, erythematous, dry, and crusted lesions on the left side of his face (Figure 1) and one on medial side of his right thigh. Both soles were red, swollen with painful large tense bullous lesions (Figure 2), and both palms were also red, swollen with multiple bullae. Rest of the physical examination was unremarkable.



**Figure 1:** Vesicular, ulcerated lesions in the mouth.



**Figure 2:** Painful bullous lesions on the soles.

## Discussion

The distribution of lesions in the mouth and on the face are typical of HFMD, but presence of large bullous lesions on palms and soles as seen in our case, sometimes adds diagnostic uncertainty. The atypical lesions of HFMD have been reported more with Coxsackievirus A6 (CVA6) infection. Among the atypical lesions of HFMD, bullae occur more in CVA6-infected children [2,3,6]. Our patient received symptomatic treatment and IV hydration. The tense, painful bullous lesions on the soles were decompressed with a sterile needle while in the ED. Dermatology was consulted during his hospitalization. Herpes PCR from both mouth and sole lesions was negative. Our patient was discharged home after 48 hours of hospitalization.

## Conclusion

In summary, our patient had an uncommon cutaneous finding (large tense bullous lesions) of HFMD. Reporting this case illustrates the importance of recognizing an atypical dermatologic presentation of HFMD to aid in earlier diagnosis, amid other differentials of bullous disorders, and to limit invasive investigations like skin biopsy.

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