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Hand Foot and Mouth Disease in an infant.

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ABSTRACT

Hand foot and mouth disease is a self limiting enteroviral lesion characterized by papulovesicular eruptions over hands and feet with circinate oral ulcers in the palate. The fever associated with the illness subsides in 48 hours and rash lasts for 7 to 10 days. Rarely they can also be associated with complications like encephalitis and myocarditis. We report a one year six month old infant with hand foot mouth disease which resolved without complications.

Keywords: hand, foot, infant, mouth disease.

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INTRODUCTION

Hand foot and mouth disease (HFMD) is an enteroviral disease caused by viruses belonging to the family picornaviridae. It is characterized by papulo-vesicular lesion on the hands feet and erosive mucosal lesions in the oral cavity. The causative organisms implicated are coxsackie A16, A10, A6, enterovirus 71 and echo virus 9[1].

Case Report

A one year six month old infant who was brought with history of fever for 2 days duration, malaise and papulo vesicular eruption over his knees and gluteal region with few lesions on his hands and feet. History of poor feeding was present. There was no history of cough or cold, loose stools or constipation. There was history of similar illness in the elder sibling ten days back but was mild compared to this sibling. On examination he was afebrile, not toxic, ulcers over tongue and soft palate was present in addition to the papulo-vesicular rash, described above, with itching. Other systems were normal. A diagnosis of Hand foot mouth disease was made based on typical clinical features with contact history. He was treated symptomatically with oral paracetamol and promethazine. The fever disappeared within 2 days and skin symptoms completely resolved by one week without any complications.

DISCUSSION

Enteroviral diseases are common in infants and young children with peak incidence seen in one year olds [2]. Several outbreaks of HFMD have happened across India in the last few years[1,2,3]. In the Vellore [2] and Odisha [3] outbreak, coxsackie A 16 was found to be the cause. In the present case knees and gluteal region were severely affected as has been reported in Odisha study. The fever in the present case was only for 2 days and the rash disappeared in 7 days. In the Odisha study, the duration of fever was 1-2 days and the time taken for rash disappearance was 8.6 ± 1.6 days. Other symptoms reported in HFMD are sore throat, malaise, pain abdomen, constipation, diarrhea, irritability and anorexia [3]. However the present case had only fever, anorexia and malaise. The oral lesions seen in the present case were in the form of aphthous stomatitis and had probably resulted in poor feeding in him. Oral lesions are seen in more than 75% of cases and are usually in the form of small aphthous lesions 1-3mm in size [3]. In a recent study on coxsackie A6 outbreak in the United States, the lesions were typically found to occur in previously eczematous skin and were in the form of erosive herpeticiform lesions, petechial & purpuric lesions and lesions resembling Gionnoti Crosti syndrome [4]. Transmission among family members is high and is through infectious body secretions, vesicular fluid and faeco-oral route. The incubation period is typically between 3 and 6 days. The differential diagnosis for this condition includes papular urticaria, bullous impetigo, eczema herpeticum, Gionotti crosti syndrome, varicella infections and molluscum contagiosum. The lesions may not be typically confined to hand, foot or mouth and may involve other regions like knees, trunk and gluteal region[4]. However, the interesting aspect of the present case is that only minimal lesions were present on the hands and feet whereas crops of papulo-vesicular



lesion were seen on the knees and gluteal region. Although it is a self limiting illness, rarely, HFMD can also lead to fatal complications like pneumonitis, myocarditis and encephalitis[5]. Lesions of HFMD can be highly variable. Although the lesion are typically known to be present in hands feet and mouth, they can also be present in the trunks, gluteal region and other parts of extremities. A contact history with index case can always be helpful along with typical distribution and morphology of lesions for a clinical diagnosis. Atypical lesions may pose a diagnostic dilemma and may require virological studies for confirmation.

REFERENCES

- [1] Gopalkrishna V, Patil RR, Patil GP, Chitambar SD. J Med Microbiol 2012; 61(pt3):420-5.
- [2] Vijayaraghavan PM, Chandy S, Selvaraj K, Pulimood S, Abraham AM. J Glob Infect Dis 2012;4(3):153-61.
- [3] Kar BR, Dwibedi B, Kar SK. Indian Pediatr 2013;50(1):139-42.
- [4] Mathes EF, Oza V, Frieden IJ, Cordoro KM, Yagi S, Howard R, et al. Pediatrics 2013; 132(1):149-157.
- [5] Sarma N. Indian J Dermatol Venereol Leprol 2013;79(2): 165-75.