

Hand-foot-mouth Disease: Outbreak in Shimla

Hand, foot, and mouth disease (HFMD) is generally a benign and self-limiting disease affecting mainly children below five years of age. It is commonly caused by coxsackievirus A16 (CVA16) and human enterovirus 71 (HEV71), and rarely by other members of picornaviridae family [1]. We report an outbreak of HFMD in Shimla, Himachal Pradesh.

Forty seven (27 males) patients of HFMD were registered in the dermatology outpatient department at a tertiary hospital, within a period of two months (July to August 2013). Thirty six (76.5%) patients were children below the age of five years (mean, 3.2 yrs); twenty five from a single kindergarten in the city. Five adults (age range 30 to 47 years), who were parents of affected children, were also registered. Skin lesions were grayish-white vesicles, elliptical to round in shape and surrounded by an erythematous halo. Oral involvement was in the form of shallow and irregular ulcers with a yellowish-grey base and erythematous margins. Oral involvement and typical lesions on hands and feet were seen in all cases. A prodrome of mild to moderate fever, anorexia, malaise, dysphagia and arthralgia was seen in 24 (51%) cases (**Fig. 1**). Palms were found to be the most common ($n=36$, 76.6%) site of involvement followed by dorsa of hands ($n=26$, 53%), soles ($n=15$, 25%), elbows ($n=14$, 29.8%) and buttocks ($n=5$, 1.1%). The buccal mucosa was the most common site ($n=39$, 82.9%) of intraoral involvement followed by palate ($n=20$, 42.5%), tongue ($n=11$, 23.4%), gingiva ($n=9$, 19.1%) and lips ($n=6$, 1.3%). No complication was noted in any case. All were treated symptomatically and lesions subsided within about a week without any sequelae.

Whereas CV/A16 infection is almost always mild, enterovirus type 71 associated HFMD may be rarely severe with encephalitis, acute flaccid paralysis, myocarditis, pulmonary edema, and even death [2,3].

Some small outbreaks over the years were followed by fatal epidemics in China, Taiwan and Malaysia [4].



FIG. 1 Grayish vesicles with erythematous halo on (a) palmar aspects of hands (b) soles (c) hands and palate, and (d) dorsa of feet.

Although no death from HFMD is reported from India since its first report in 2003 but similar trends may be followed in a genetically susceptible population [1]. There is an urgent need to increase the awareness level among healthcare professionals to diagnose HFMD.

SUBHASH KASHYAP AND GK VERMA

*Department of Dermatology,
Venereology and Leprosy, Indira Gandhi Medical College,
Shimla, Himachal Pradesh, India.
drskash@gmail.com*

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