Hand Foot and Mouth Disease

A 6-year-old boy, immunized for his age, presented with fever, malaise and asymptomatic oro-cutaneous lesions for the past 3-4 days, after being involved in cleaning activity of a fish pond. On examination he was febrile (temperature 100°F) with no lymphadenopathy. Oral cavity showed aphthae-like lesions having small yellowish-white shallow necrotic vesicles surrounded by red areola over palate, buccal and labial mucosae (Fig.1). Cutaneous lesions comprised multiple erythematous, 3-5mm, round/oval macules, and pearly-white vesicles with a red areola over palms and soles (Fig.2), dorsal aspect of fingers, buttocks and elbows. Systemic examination and investigative profile were essentially normal. A clinical diagnosis of hand, foot and mouth disease was made. The child was treated symptomatically.

Hand, foot and mouth disease (HFMD) is a viral infection usually caused by enteroviral genuses (usually coxsackie virus A16, A5, A10, and sometimes coxsackie virus-B or human enterovirus 71). HFMD is contagious usually spread via orofecal or respiratory routes. It is a disease primarily



FIG.1 Small yellowish-white aphthae-like lesions with surrounding erythematous areola seen over labial mucosa. Similar lesions were present over buccal mucosa and anterior palate.

affecting children, although the disease occurs occasionally in adults. The diagnosis is primarily clinical by the characteristic distribution of cutaneous lesions over hands, feet and buttocks along with oral lesions. The cutaneous lesions begin as 3-7mm erythematous macules evolving rapidly into pale white, oval, thin-walled vesicles with a red areola. The lesions are typically elliptical, their long axis parallel to the skin lines (*Fig.2*). They fade over 2-3 days and heal without crusting or scarring in about a week. Most HFMD patients need only symptomatic treatment and reassurance in view of its self-limiting benign clinical course.

In the absence of cutaneous lesions the oral lesions of HFMD may be mistaken for aphthous ulcers, *Herpes simplex* gingivostomatitis or oral



FIG.2 Small multiple erythematous, round/oval macules and pearly-white vesicles with a red areola (arrows) over palms and soles.

INDIAN PEDIATRICS

IMAGES

varicella lesions. However, the oral erosions in HFMD are usually smaller, more uniform and asymptomatic unlike those in herpetic gingivostomatitis which are painful and coalesces, and those of varicella usually last longer and always crust. Unlike HFMD, both varicella and herpes lesions will also show multinucleated giant cells in Tzanck smears. Herpangina, another self limiting disease in children due to multiple types of coxsackie viruses and echoviruses and characterized by acute febrile illness with headache, sore throat, dysphagia, anorexia, occasionally stiff neck, and small yellowish-white vesicles/ulcers with erythematous areola distributed irregularly over posterior oropharynx (anterior faucial pillars, tonsils, uvula, or soft palate), closely mimics HFMD. However, absence of skin lesions and characteristic distribution of oral lesions in herpangina are diagnostic. The skin lesions of HFMD can be distinguished from *Herpes simplex* associated erythema multiforme by the skin lesions which are round/oval, grey and targetoid.

Karan Inder S Mehta and Vikram K Mahajan, Department of Dermatology, Venereology & Leprosy, Dr RP Government Medical College, Kangra (Tanda) 176 001, HP, India. vkm1@rediffmail.com

Cutaneovisceral Angiomatosis

A 4 year old girl presented with painful hemorrhagic lesions all over her body that had gradually increased in size and number since birth. Physical examination revealed multiple, various sized lesions localized on her scalp, face, ears, lips, oral cavity, trunk, arms, palms, genital area, legs and feet (*Figs.* 1 to 3). Her right foot had been amputated in another center at the age of 2 because of multiple giant hemorrhagic hemangiomas. Hemoglobin was 9.3 g/dL and platelet count was 197×10^{9} / mm³. X-ray revealed radiolucent lesion on the diaphysis of the left ulna with multiple small round calcifications in the surrounding soft tissues interpreted as nonspecific lesions (*Fig.* 4). Abdominal ultrasound and cerebral computed tomography scans were normal.

Biopsy of the of cutaneous lesion revealed thinwalled, blood-filled vascular channels lined by bland, sometimes hobnail endothelial cells and endothelial hyperplasia.

Cutaneovisceral angiomatosis is a rare vascular disorder characterized by generalized multiple, red brown to blue, discrete papules, macules, plaques and nodules ranging in size from millimetres to



FIG.1 Frontal view showing multiple, various sized lesions localized on face, ears, lips, trunk, arms, palms, genital area, legs and feet.

INDIAN PEDIATRICS