



Hand, Foot and Mouth Disease and Echovirus 3: A Comment to Høgsberg & Bygum

Pascal DEL GIUDICE and Thomas HUBICHE

Dermatology and Infectious Diseases Unit, Centre Hospitalier de Fréjus-Saint-Raphél, 240 avenue Saint Lambert, FR-83600 Fréjus, France. E-mail: del-giudice-p@chi-fsr.fr

We read with great interest the case report by Høgsberg & Bygum (1) of atypical hand, foot and mouth (HFM) disease caused by echovirus 3; however, we do not share their conclusion. The finding of an enterovirus, such as echovirus 3, in stools can be incidental. Indeed, enteroviruses can be excreted in stools for 10 weeks or more after an infection (2). Therefore the finding of an enterovirus

in stools is not sufficiently specific to draw a definitive conclusion of causality in HFM. This is even more the case if the enterovirus isolated is not considered a usual pathogen associated with HFM. The virus is present in skin vesicle fluid (3), therefore the most specific virological test in HFM is the sampling of the contents of skin vesicles using enterovirus PCR to confirm the causal link.

Reply to the Comment by Del Giudice & Hubiche

Trine HØGSBERG and Anette BYGUM

Department of Dermatology, Odense University Hospital, Søndre Blvd 29, DK-5000 Odense C, Denmark. E-mail: trinehoegsberg@yahoo.dk.

We appreciate the comment from Del Giudice & Hubiche. We share the point that the detection of echovirus 3 may be purely incidental. However, the patient presented a clinical picture compatible with atypical hand, foot, and mouth disease, and no other differential diagnoses fitted appropriately. A skin swab was negative for herpesvirus, varicella zoster virus, enterovirus and pathogenic

bacteria. Echovirus 3 was detected in stool. The finding of echovirus 3 has been reported previously in a patient with hand, foot, and mouth associated onychomadesis (4), but could also be seen in controls. We must conclude that we found a temporal relationship of echovirus 3 and atypical hand, foot, and mouth disease, but cannot prove a causal relationship.

REFERENCES (for both papers)

1. Høgsberg T, Bygum A. Disseminated vesicular rash in an immunocompetent adult woman: a quiz. atypical hand, foot, and mouth disease caused by echovirus 3. *Acta Derm Venereol* 2018; 98: 163–164.
2. Chung PW, Huang YC, Chang LY, Lin TY, Ning HC. Duration of enterovirus shedding in stool. *J Microbiol Immunol Infect* 2001; 34: 167–170.
3. Hubiche T, Schuffenecker I, Boralevi F, Léauté-Labrèze C, Bornebusch L, Chiaverini C, et al. Dermatological spectrum of hand, foot and mouth disease from classical to generalized exanthema. *Pediatr Infect Dis J* 2014; 33: e92–e98.
4. Davia JL, Bel PH, Ninet VZ, Bracho MA, González-Candelas F, Salazar A, et al. Onychomadesis outbreak in Valencia, Spain associated with hand, foot, and mouth disease caused by enteroviruses. *Pediatr Dermatol* 2011; 28: 1–5.