

Onychomadesis—A Late Complication of Hand-Foot-Mouth Disease

9-year-old boy was admitted for evaluation of changes of his fingernails (Figure). The changes began within the last 2 weeks. He presented with the same complaint at another hospital 2 days prior, and he was diagnosed with a nail deformity related to deficiencies of vitamins and zinc. His parents and he denied nail trauma, topical cream use, and fungal infection. However, his medical record reveled that he suffered from severe hand-foot-mouth disease (HFMD) 2 months prior. Physical examination showed nail matrix arrest on his fingers. Onychomadesis, which is the complete shedding of the nail from the proximal matrix, was seen on the thumb and index finger of his left hand, and on the index and middle fingers of his right hand. The nail changes healed without medication within 2 months.

Onychomadesis is the spontaneous separation of the nail plate from the matrix. Local or systemic drug exposure, such as chemotherapeutic agents, penicillin, azithromycin,



Figure. Onychomadesis on the nails of index and middle fingers of right hand.

anti-epileptic drugs and retinoids, infection, fever, systemic diseases (Kawasaki disease, immunodeficiency, Stevens-Johnson syndrome), and nutritional (vitamins and minerals) deficiency are reported etiologies of these specific nail changes in children. Another important cause of onychomadesis is HFMD. It is considered to be one of the characteristics of HFMD attributable to coxsackievirus type A6. The mechanism is not known. Generally, there is no need for treatment and there is spontaneous resolution within 1 to 2 months.

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References

- Bettoli V, Zauli S, Toni G, Virgili A. Onychomadesis following hand, foot, and mouth disease: a case report from Italy and review of the literature. Int J Dermatol 2013;52:728-30.
- 2. Scheinfeld N, Dahdah MJ, Scher R. Vitamins and minerals: their role in nail health and disease. J Drugs Dermatol 2007;6:782-7.
- **3.** Hardin J, Haber RM. Onychomadesis: literature review. Br J Dermatol 2015;172:592-6.
- **4.** Clementz GC, Mancini AJ. Nail matrix arrest following hand-foot-mouth disease: a report of 5 children. Pediatr Dermatol 2000;17:7-11.
- Guimbao J, Rodrigo P, Alberto MJ, Omeñaca M. Onychomadesis outbreak linked to hand, foot, and mouth disease, Spain, July 2008. Euro Surveill 2010; 15. http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19663. Accessed March 10, 2016.
- Osterback R, Vuorinen T, Linna M, Susi P, Hyypiä T, Waris M. Coxsackievirus A6 and hand, foot, and mouth disease, Finland. Emerg Infect Dis 2009;15:1485-8.