

Exploring Onychomadesis secondary to hand-foot-mouth: medical review and case report

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Summary

Onychomadesis is a late manifestation associated with hand-foot-mouth disease. The diagnosis is made by physical examination and dermatoscopy showing detachment of the nail plate. No pharmacological treatment is required and it resolves over a course of 12 weeks.

Keyword: Onychomadesis, Dermatoscopy, coxsackie

Explorando la Onicomadesis secundaria a mano-pie-boca: revisión médica y reporte de caso

Resumen

La onicomadesis es una manifestación tardía asociada a enfermedad mano pie boca. El diagnóstico se realiza mediante examen físico y dermatoscopia que muestran el desprendimiento de la lámina

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ungueal. No se requiere de un tratamiento farmacológico y se resuelve en un curso de 12 semanas.

Palabra clave: Onicomadesis, Dermatoscopia, coxsackie

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INTRODUCTION

Hand-foot-and-mouth disease is a pathology largely caused by coxsackievirus serotypes A6, A10, A16 and A71. It is most prevalent during the summer season and usually affects children from 6 months to under 10 years of age; however, there are cases reported in adolescents and adults. (1-3)

Incubation time may vary according to age, but is estimated to last about 4 to 6 days. Onset symptoms are fever, myalgia and even abdominal pain associated with cutaneous manifestations: painful ulcers on oral and genital mucosa and vesicles on palms of hands and soles of feet that usually resolve after 7 days. (2-6)

Among the mild manifestations of hand-foot-and-mouth syndrome, beau's lines and onychomadesis have been found; on the other hand, encephalomyelitis and flaccid paralysis have been reported as part of the severe complications. (5)

The aim of this article is to review the literature on onychomadesis following hand-foot-mouth syndrome, a manifestation that occurs in some patients.

Clinical case

A female patient of 3 years and 6 months of age comes with her mother for consultation due to nail lesions on the hands and right foot of approximately 3 days of evolution. Her relative had no previous trauma, however, 4 weeks ago she mentions a condition

characterized by vesicles on the palms of the hands and feet accompanied by ulcers on the tongue and throat, diagnosed as hand foot mouth syndrome by a physician at the same dermatological center. Physical examination revealed detachment of the nail plates on the index finger of the right hand, third finger of the left hand and first orthotic of the right foot.



Image1. detachment of the nail plate on hands



Image2. detachment of the nail plate on the first orthotic of the right foot.

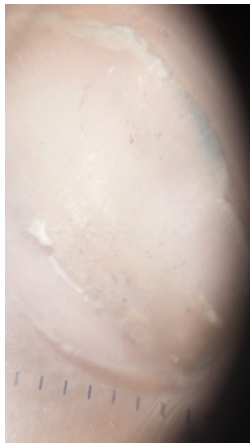


Image 3 Dermatoscopic assessment of onychomadesis of the right foot

RESULTS

Onychomadesis is the detachment of the proximal nail plate from the matrix that does not affect the distal part of the nail; it has been related to autoimmune diseases, trauma, medications or patients undergoing chemotherapy sessions. (7-10)

Hand-foot-mouth syndrome is usually a late manifestation, occurring 30 to 90 days after coxsackievirus infection, and is not associated with signs of inflammation or pain. The relationship of onychomadesis following hand-foot-mouth syndrome was first described in 2000 in Chicago, USA.

At present, a specific mechanism of onychomadesis as a late manifestation of hand-foot-mouth syndrome has not been described; however, Shikuma et al. indicate that the cause of the damage occurs mainly due to the replication of enteroviruses, which were detected in fragments of detached nail plates that as a consequence generate dystrophy of the nail matrix. (11) On the other hand, Chiu and collaborators mention that the presence of "cutaneous lesions around the nail matrix can be a possible cause of onychomadesis associated to virus". (12)

The diagnosis is made by physical examination and a good anamnesis is necessary to determine the causative factor of this manifestation; laboratory tests may be indicated only in case of suspicion of any other etiological agent not associated with hand-foot-and-mouth disease. In dermoscopy, Beau's lines can be observed, which are transverse lines of the lamina, detachment of the proximal part of the nail plate without other periungual alteration. (9) Due to being a silent manifestation it does not require pharmacological treatment since it resolves in a course of 12 weeks; however, general indications are given to parents such as keeping the nail area clean and avoiding direct lesions on the nail (10,13). (10,13)

CONCLUSIONS

Onychomadesis, a late manifestation associated with hand-over-mouth disease first reported in 2000, is a poorly studied pathology that, with further study, would allow a better diagnostic approach.

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