

ONYCHOMADESIS AND HAND-FOOT-AND-MOUTH DISEASE

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Summary

Hand-foot-and-mouth disease (HFMD) is a common viral affection. Onychomadesis can be associated with HFMD. Seven children (3 boys and 4 girls) aged between 7 and 11 years were consulted during 2018 for an acquired onychodystrophy of the nails from the hands and feet. The anamnesis revealed that all patients were diagnosed with HFMD 3-5 weeks before the appearance of onychomadesis.

Onychomadesis is a manifestation that can be associated with HFMD. This occurs on average 4-5 weeks after the infection, the Coxsackie A₆ virus being the most commonly agent causing the disease. The pathophysiology of onychomadesis is unclear. Evolution is favorable, the nail rising normally about 9 months in the legs and 3 months in the hands.

Key words: Hand-foot-and-mouth disease, Onychomadesis, clinical aspects.

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Introduction

Hand-foot-and-mouth disease (HFMD) is a common viral disease caused by Coxsackie virus group A (A₆ and A₁₆) and B and enterovirus A. The disease is very contagious. Onychomadesis can be associated with HFMD.

Material and method

During the year of 2018, 7 children (3 boys and 4 girls) aged between 7 and 11 years were consulted for an acquired onychodystrophy of the fingernails (Fig. 1-3) and toenails. The general condition of the children was excellent, they did not have systemic diseases, they had not recently undergone medical treatments and did not suffer injuries of the toenails and fingernails. The dermatological examination revealed the distal take-off of the nail blade of the fingers from the hands and feet. Anamnesis revealed that all patients were diagnosed with HFMD (Fig. 4) 3-5 weeks before the appearance of nail changes. The

established diagnosis was post-HFMD acquired onychomadesis.

Discussions

Hand-foot-mouth-disease syndrome (HFMD) is a viral disease caused by Coxsackie virus group A (A₆ and A₁₆) and B and enterovirus A₇₁, affecting children under 10 years of age. The contagiousness is increased, the disease evolving in the form of epidemics.

The onset of HFMD is with fever and affection of the general condition accompanied by the appearance on the oral mucosa of vesicles on an erythematous base that turns into erosions, followed by exanthema and vesicles located on the hands and feet with the possibility of extension on limbs and trunk. Evolution is benign, with lesions disappearing within a week.

Onychomadesis is a manifestation that can be associated with HFMD. This is characterized by stopping the nail growth for a long time, unable to ensure the continuity of the nail blade. The

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Figure 1. Onychomadesis on a 10 year old boy after HFMD



Figure 2. Onychomadesis on a 8 year old girl after HFMD



Figure 3. Onychomadesis on a 7 year old girl after HFMD



Figure 4. HFMD

new angled blade will penetrate insidiously under the old one, bringing its progressive distal take-off to onychoptosis.

If onychomadesis affects a single nail, a local cause such as trauma or paronychia should be sought. Multiple nail damage can occur in diseases such as Kawasaki syndrome, acute erythematous lupus, immune deficiency, thrombopenia, Stevens-Johnson syndrome, and infectious diseases such as scarlet fever and HFMD. Various medications such as anticancer therapy, valproate, psoralen, lithium, beta-blockers, anticonvulsants, anticoagulants [1] can also cause onychomadesis. The familial and idiopathic form of onychomadesis [2] are also described.

Onychomadesis occurs on average 4-5 weeks after infection, the Coxsackie A₆ virus being the most commonly reported in the appearance of onychomadesis [3,4]. The pathophysiology of onychomadesis is unclear, incriminating an inflammation secondary to the nail matrix infection, inhibiting the growth of the nail blade. Another hypothesis incriminates excessive washing and disinfection of affected fingers that would lead to inhibition of matrix proliferation [5].

Evolution of onychomadesis is favorable, the nail rising normally about 9 months for the toenails and 3 months for the fingernails. There is no preventative treatment to avoid onychomadesis in HFMD.

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Conflict of interest
NONE DECLARED

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