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CASE REPORT

Hand-foot-mouth syndrome, should we worry about?

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Abstract

Hand-foot-mouth syndrome is a benign contagious viral infection that affects mainly children and complications of the disease are rare. In recent years, there has been an increase in the number of cases in several countries and we must be alert to new cases in Brazil. This case report is intended to demonstrate the evolution of a child in one of the most serious forms of the disease with extensive injuries to the body associated with the need for hospitalization due to prostration and difficulty in eating. RCL patient, 2 years old, onset of prostration and irritability that evolved with lesions in the oral cavity and hands, with progressive worsening in hours. The photographic evolution of the lesions shows how quickly the lesions appear and their appearance. The report aims to draw attention to more severe conditions of the disease and the need for greater attention by the pediatrician of signs of severity that can even lead to death.

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INTRODUCTION

Hand-foot-mouth disease or syndrome (MPB) is a contagious viral infection of fecal-oral transmission caused by Enteroviruses. The rash is benign and localized in most patients, however outbreaks with extensive and severe eruptions have been reported recently in several countries . In addition, some patients have an unfavorable evolution, and even deaths related to the disease are observed[1].

The most common clinical manifestations are fever associated with a papular -vesicular eruption on the palms and soles, generally more oval in the shape of a "grain of rice", and ulcerated lesions in the oral cavity that may not be present in all cases. The main concern in most cases is dehydration, but in recent years it has been observed in epidemics in Asia that the disease can be fatal, mainly related to enterovirus 71, and may involve the central and even the autonomic nervous system, causing alterations in circulation, cardiac and even pulmonary edema. In addition, clinical conditions with disseminated lesions that cause pain and are quite debilitating have been described, with the need for hospitalization and management of the hospitalized condition being common in these cases[1].

CASE REPORT

RCL, 2 years old, male, with no history of previous diseases, started with prostration, irritability and generalized pruritus. Five hours later, multiple macules measuring 3 mm in diameter appeared in the perioral region and hands, associated with lesions in the oral cavity (Figure 1 A and B). The lesions evolved in 2 hours to blisters. At this moment, there was a fever of 38.2ºC and vomiting without blood. Soon after, lesions appeared on the feet and the rest of the body, with the highest concentrations being on the hands, feet and oral region Figure 1.

On the second day, he presented worsening of prostration and fever of 39ºC, associated with an increase in lesions, which led to hospitalization. Symptomatic treatment was started and lesions compatible with the diagnosis were observed (Figure 1-C). The test results showed no significant changes, with a leukocyte count of 13,500 with 71% neutrophils. On the third day, there was improvement in prostration, cessation of fever and pruritus (Figure 1-D).

On the fourth day the blisters began to improve and he was discharged from the hospital. On the fifth day of illness, the skin evolved with desquamation that lasted 15 days, starting with the buttocks, after the face, hands and the rest of the body (Figure 2-A). Three weeks after the onset of the viral condition, the process of all nails falling out. (Figure 2-B)

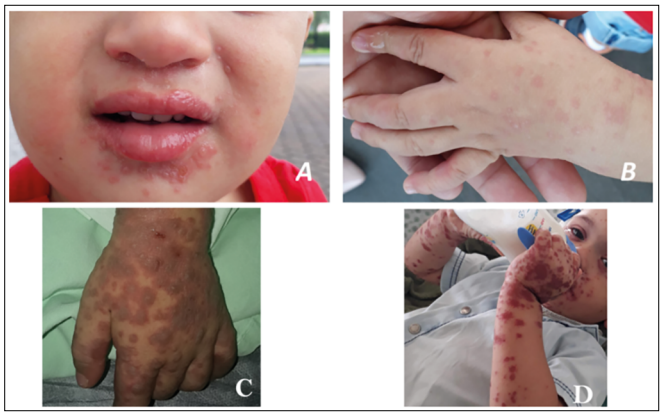

Figure 1. In **A.** initial perioral lesions and in **B.**, the initials of the hands. In **C.**, evolution of the lesions after a few hours and in **D.**, lesions after 3 days of disease evolution.

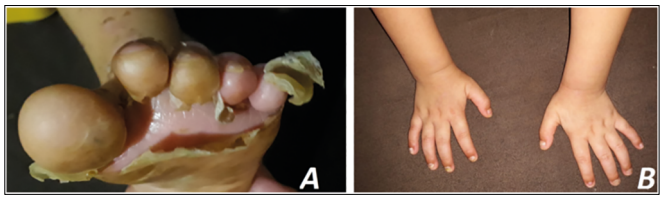

Figure 2. In **A.** scaly lesions of the feet that occurred after discharge and **B.,** onychomadesis of the fingernails.

DISCUSSION

MPB is a benign disease, in most cases, but it should be noted that in cases of epidemics the disease can progress to more severe conditions and even deaths. The etiology is viral, mainly Coksackies (A6, A10 and A16) and by Enterovirus 71, and during epidemics these viruses circulate together, which results in clinical pictures that are indistinguishable in practice. Other serotypes have been reported to cause outbreaks and are less frequent. Most of the most severe cases are in children under five years of age, and they may present a greater number of lesions than usual, as is the case described, or even present an unfavorable evolution with involvement of the nervous system[1-4].

Laboratory changes in the disease are nonspecific, with an increase in leukocyte count associated with neutrophilia, as initially found in this patient. In some moments, an increase in CK can be observed, when they present associated myositis[1].

Extensive forms usually present vesiculobullous lesions, located on the elbows, knees and buttocks and even on the dorsal region of the feet and hands. Some patients have a large number of lesions, and patients with skin diseases such as atopic dermatitis may have a large number of lesions in the active sites of the underlying disease. The patient in question does not have a history of previous disease, but a rapid evolution to the most severe form of the disease, which ended up indicating hospitalization to follow the evolution of the condition[3,5].

Marked desquamation of hands and feet, as well as more severe forms , seem to have more association with the coksackie virus A6. Peeling occurs after 2 to 3 weeks, after which onychomadesis begins, which in some cases can affect all the nails, as was the case with the patient[2,3,5,6].

After these desquamation and onychomadesis events, the skin is restored without any scar or sequel, and the patient has a satisfactory evolution.

The main concern in most cases is dehydration, mainly due to the difficulty in ingesting liquid due to aphthous lesions in the oral cavity that can result in difficulty in swallowing their own saliva. The treatment of the disease is symptomatic, with intravenous hydration in cases of difficult ingestion. The use of immunoglobulin is recommended in severe cases with signs of impairment of the autonomic nervous system, with signs of dysautonomia[1].

Re-infections, even with the same serotype, have been demonstrated in China. Vaccines against enterovirus 71 are currently being studied in this country[7].

CONCLUSION

Cases of MPB are common in the pediatric age group, with cases with extensive lesions that require close observation for possible signs of dysautonomia or impairment of the autonomic nervous system. The disease, although benign in most cases, can present a risk such as dehydration and even severe impairment that can lead to death.

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