An Atypical Presentation of Influenza Virus Infection

Uma Manifestação Atípica de Gripe

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KEYWORDS: Adolescent; Exanthema; Influenza B virus

PALAVRAS-CHAVE: *Adolescente; Exantema; Vírus da Influenza B*

A previously healthy 14-year-old girl presents in mid-winter season a 12-hour history of fever, headache and pruritic exanthema affecting face, trunk and limbs. Vital signs, including blood pressure, were normal. Observation revealed a generalized confluent maculopapular exanthema and angioedema of the face, with no signs of bleeding diathesis. Nonexudative tonsillitis was diagnosed seven days before treated with amoxicillin. A serologically confirmed Epstein-Barr virus (EBV) infection two years before was reported. Allergies or previous urticaria were denied. She was not taking medication, consumed new foods nor new skin-care products. Despite corticoid and antihistamine treatment, the exanthema worsened, affecting palms (Fig. 1) and soles, progressing to purpuric (Fig. 2) with intense pruritus, and the patient was hospitalized. Coagulation and complete blood cell count were normal, without eosinophilia. C-reactive protein, hepatic enzymes and urinalysis were unremarkable. Etiological investigation for virus (CMV, herpesvirus, enterovirus, parvovirus, respiratory viruses), bacteria (*Chlamydia pneumoniae*, *Mycoplasma penumoniae*, *Borrelia burgdorferi*, *Coxiella burnetti*, *Treponema pallidum*, *Steptococcus pyogenes*), blood and stool culture and parasites were negative. There was no EBV reactivation (EA-IgG negative/VCA-IgM negative/VCA-IgG positive/EBNA-IgG positive). Nasal/throat swab screening by real-time polymerase chain reaction was positive for Influenza B. Autoimmunity screening was negative, as well as

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Received/*Recebido*: 09/12/2020 - Accepted/*Aceite*: 14/01/2021 - Published online/*Publicado online*: 26/01/2021 - Published/*Publicado*: 31/03/2021

FIGURE 1. Macular exanthema 24 hours after the onset of generalized urticaria affecting palms (A) and dorsum (B) of both hands.

FIGURE 2. Macular and purpuric exanthema affecting the upper limb (24 hours after the onset of disease).

specific immunoglobulin E for amoxicillin and ibuprofen, with no recurrence after re-exposure. Fever lasted 24 hours and the rash disappeared in five days.

Generalized pruritic exanthema as a manifestation of influenza has been rarely reported. Descriptions of rash associated to influenza B infection occur in children, usually nonpruritic maculopapular sparing palms and soles.[1-3]

According to the Portuguese Influenza National Surveillance Program, Influenza B was the main subtype circulating in this period (79%).[4] Influenza B viral shedding is bimodal, exhibiting a second peak 24-to-48 hours after the onset of symptoms, and rapidly declining.[5] Both arguments favor the association between influenza B and exanthema, although causality cannot be established.

RESPONSABILIDADES ÉTICAS

CONFLITOS DE INTERESSE: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

FONTES DE FINANCIAMENTO: Não existiram fontes externas de financiamento para a realização deste artigo.

CONFIDENCIALIDADE DOS DADOS: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

CONSENTIMENTO: Consentimento do doente para publicação obtido.

PROVENIÊNCIA E REVISÃO POR PARES: Não comissionado; revisão externa por pares.

ETHICAL DISCLOSURES

CONFLICTS OF INTEREST: The authors have no conflicts of interest to declare.

FINANCING SUPPORT: This work has not received any contribution, grant or scholarship.

CONFIDENTIALITY OF DATA: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

PATIENT CONSENT: Consent for publication was obtained.

PROVENANCE AND PEER REVIEW: Not commissioned; externally peer reviewed.

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