

Urticarial vasculitis in a girl with a positive SARS-CoV-2 IgG result

Piotr Brzezinski^{1,2}

¹Department of Physiotherapy and Medical Emergency, Faculty of Health Sciences, Pomeranian Academy, Slupsk, Poland,

²Department of Dermatology, Provincial Specialist Hospital in Slupsk, Ustka, Poland

Corresponding author: Piotr Brzezinski, MD PhD, E-mail: brzezo77@yahoo.com

In December 2019, China reported the first group of pneumonia cases associated with a new coronavirus, SARS-CoV-2, which now has become a pandemic.

Herein, we report a case of urticarial rash in a girl with only a positive SARS-CoV-2 IgG result (negative nasopharyngeal swab).

Since the end of January 2020, the 9-year-old female presented skin lesions in the form of scattered urtica that merged into larger conglomerates and covered the entire body. s (Fig. 1). The lesions lasted more than 24 hours; on average lasted 3 days. After antihistamine treatment, the skin lesions gradually faded away and completely disappeared within three weeks. In the interview, the girl's parents fell ill with COVID-19 in November 2020.

In laboratory tests: Eosinophils (8,2% N: 0,00-4,00); Aspartate transaminase (35 U/l N:5-34); SARS-CoV-2 IgG – 764, p-ANCA and c-ANCA – negative.

In the histopathological examination around the vessels in the dermis, lymphocytic infiltrates and less numerous neutrophils and eosinophils. The histopathologist confirmed urticarial vasculitis.

Of late, there has been a growing interest regarding the dermatological manifestations in COVID-19. In an early retrospective study among 140 patients Zhang et al reported 11.4% patients to have drug hypersensitivity and 1.4% to have urticaria [1]. In a report from Italy, 18/88 (20.5%) patients had dermatological manifestations, with 3 patients reporting widespread urticaria [2]. As per one review, 88/256 (34.3%) patients across 16 studies demonstrated skin manifestations,

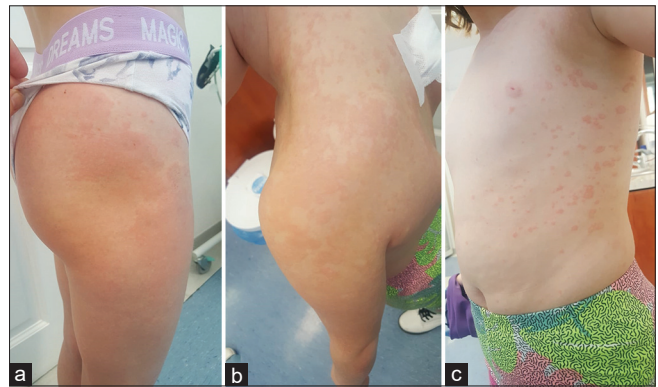


Figure 1: (a-c) Urticarial vasculitis in a 9-year-old female.

mostly as erythematous maculopapular rash, urticaria or vesicular rash [3]. On closer look, we find urticaria to be a commonly reported finding among COVID-19 patients. In one of the large prospective studies involving 375 COVID 19 cases, urticaria was present in 19% cases, with mean duration of urticaria being 6.8 days [4]. While there was a report of one COVID-19 patient presenting with urticaria and dry cough without any fever, the timing of appearance of urticaria was variable, with lesions appearing before, with, as well as >48 hours after onset of fever [5]. In most cases, diagnosis of urticaria was made clinically and oral 2nd generation antihistamines were prescribed with satisfactory results. Although skin manifestations did not correlate with disease severity in most case reports, the prospective study from Spain suggested that presence of urticaria and maculopapular lesions were associated with more severe COVID 19 illness and a higher (2%) mortality [4].

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

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