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Urticaria: As a Presenting Symptom in an Asymptomatic COVID 19 Patient

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Abstract

The global pandemic COVID-19 presents with typical respiratory and extrapulmonary clinical manifestations. This has also been associated with a variety of rare dermatological manifestations predominantly in asymptomatic patients. Here, we present a unique case of a 33-year-old male, with acute urticaria not responding to routine drug treatment but tested positive for COVID-19. We report this case as urticaria can be an initial manifestation of COVID-19 without any other clinical findings. Taking this suspicion into consideration, timely diagnosis, treatment and transmission of the SARS-COV-2 infection can be prevented.

Key words: COVID-19; Dermographism; Urticaria

Dear Editor,

Recently, there has been an increased interest regarding dermatological manifestations in patients suffering from COVID-19 infection. Acute urticaria is characterized by wheals and/or angioedema present for less than six weeks.¹ Association between SARS-CoV-2 infection and acute urticaria is more presumptive as most common trigger for acute urticaria is noted to be an upper respiratory infection with viral infections.² Here, we present a unique case of 33-year-old male, with acute urticaria not responding to routine drug therapy and later turned COVID positive.

A 33 years old male patient presented with 72-hours history of multiple red to skin colored, raised, severely itchy rashes distributed all over the body. Patient was admitted for further evaluation and treatment. On examination, multiple discrete to confluent wheals of size 2x3cm to 5x8cm were present on both upper, lower limb and trunk sparing face, and mucosa. (Figure 1A & 1B). Dermographism was positive. (Figure 2).

He denied history of fever, sorethroat, arthralgia, angioedema, drug intake and contact with

cosmetics or detergents. His routine blood and urine investigations were normal. Absolute eosinophilic count was 137 cells/cu.mm. Inj Pheniramine maleate 2ml intramuscularly was administered twice daily with Tab. Hydroxyzine hydrochloride 25 mg four times a day for 2 days but symptoms reappeared. Wheals subsided completely on medication leaving behind annular lesion present over chest (Figure 3) reappearing within 24 hours over trunk and upper limb.

To above treatment we added Tab. Fexofenadine 180 mg once a day and Tab. Bilastin 20 mg once at night for 2 days with no change in symptoms. Further we added Tab. Prednisolone 30 mg once a day for 2 days but still patient did not respond. Then considering Covid-19 pandemic, on sixth day we sent nasopharyngeal and oropharyngeal swab for RT-PCR (COVID 19) test, which turn out to be positive. Patient was shifted to covid ward and was managed with supportive care and antihistamines.

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Figure 1A and 1B: Urticarial wheals over left forearm and lateral aspect of trunk



Figure 3: Annular lesion of urticaria on healing over right side of chest

COVID-19 is associated with cutaneous manifestations including urticaria, morbilliform eruption, chicken pox–like vesicles, dry gangrene, transient livedo reticularis,



Figure 2: Dermographism over left forearm

red papules on the fingers resembling chilblains and covid toes.³ Skin manifestations are common for viral infections. Urticaria, specifically, has been associated with a number of viral infectious agents.²

In Spanish prospective study,⁴ urticarial lesions made up to 19% of the skin manifestations in patients with COVID-19. Viral infections may present as urticaria secondary to complement activation resulting in activation of mast cell, cytokine storm and excess of angiotensin II accumulation.⁵

The mainstay of treatment is avoidance of triggers. First-line treatment is second-generation H1 antihistamines, which can be titrated to greater than standard doses. First-generation H1 antihistamines, H2 antihistamines, leukotriene receptor antagonists and corticosteroids may be used as adjunctive treatment.

As urticaria is commonly seen in dermatology clinics, COVID-19 should be an important etiologic consideration while evaluating patients suffering from urticaria not responding to routine drugs available, particularly in asymptomatic cases.

References

1. Antia C, Baquerizo K, Korman A, Bernstein JA, Alikhan A. Urticaria: A comprehensive review: Epidemiology, diagnosis, and work-up. *J Am Acad Dermatol.* 2018; 79(4): 599- 614. <https://doi.org/10.1016/j.jaad.2018.01.020>
2. Imbalzano E, Casciaro M, Quartuccio S, Minciullo PL, Cascio A, Calapai G, Gangemi S. Association between urticaria and virus infections: A systemic review. *Allergy Asthma Proc.* 2016(1):18-22. <https://doi.org/10.2500/aap.2016.37.3915>
3. Bellodi Schmidt F, Chen V, Cohen B. Dermatologic findings associated with COVID-19 in pediatric patients. *Contemporary Pediatrics.* 2020; 37(9): 26- 32.
4. Galvan Casas C, Catala A, Carretero Hernández G. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. *Br J Dermatol.* 2020;183:71–77. <https://doi.org/10.1111/bjd.19163>
5. Ye Q, Wang B, Mao J. The pathogenesis and treatment of the ‘Cytokine Storm’ in COVID-19. *J Infect.* 2020;80:607–613 <https://doi.org/10.1016/j.jinf.2020.03.037>