

Letter to the Editor

Corticosteroid use in urticaria multiforme cases



Dear Editor,

We read with great interest the recently published article by Samorano *et al.*¹ The paper mainly drew our attention because we are currently preparing a manuscript on the same topic. The authors described two Urticaria Multiforme (UM) patients developed on the ground of infectious disease. The first presented UM case was treated with oral corticosteroid, started on the 4th day of lesions and discoloration was described in a few days. We would like to mention that treating these patients with corticosteroids is a common mistake usually following a misdiagnosis. The literature and our experience supports this concept in a way that steroid administration may worsen the underlying infectious disease, and there is strong evidence that this treatment regimen will not shorten the duration of the disease.² In a recent experience of our department, a 4 year old girl referred us from a secondary health care unit who had started oral corticosteroid therapy on the 2nd day of her eruptions without fever and continued for 5 days without any resolution. We put the diagnosis on the day of her admission due to the patient's history and clinical presentation of her eruptions. The steroid regimen stopped and a first generation antihistamine (Hydroxyzine 1 mg/kg/day) prescribed for the

following week. The lesions disappeared on the 13th day, as presented in Figure 1.

Therefore as it is mentioned at the discussion section of Samorano's paper,¹ oral corticosteroids could only be suggested for more refractory UM cases.^{2–4} The lesions will disappear in a mean time of 2–12 days independent of corticosteroid use. The first case presented, received corticosteroid therapy started on the 4th day of his eruptions, and no information was given about the second patient's medication particularly administered during the interval for the histopathology result. In such cases H1 and H2 blocker antihistamines may be more beneficial to control the disease, preferably with antibiotic administration.

At this point the most important step in an UM case is the initial diagnosis and the treatment regimen started. The previously described diagnostic criteria of UM should be considered while making the differential diagnosis of a patient.^{2,3,5} We had similar experiences due to use of corticosteroids at their initial treatments and admitted us in more advanced conditions due to underlying infections of EBV and CMV. However an experienced pediatric allergist could easily reach to the appropriate diagnosis upon a patient's history and clinical features as described by Shah *et al.*³ The authors were clear about their investigations to their patients

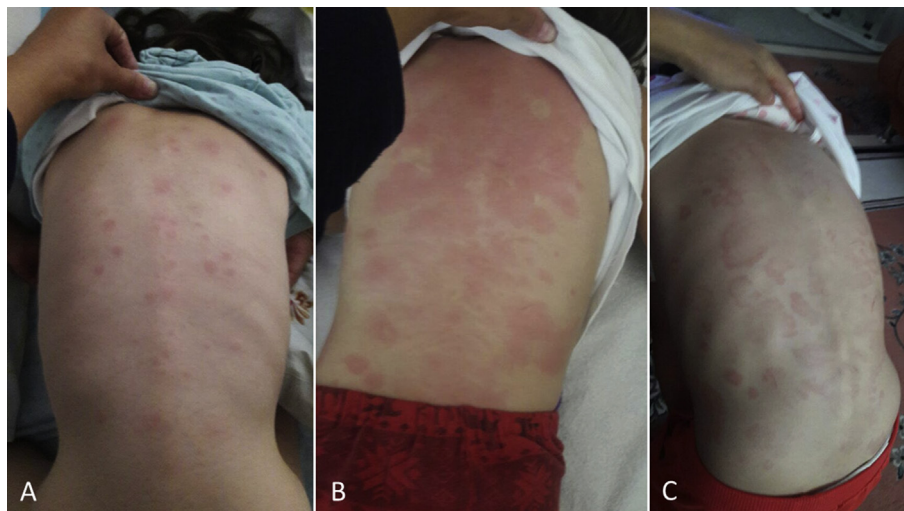


Fig. 1. Pictures taken from the urticaria multiforme case after administration of corticosteroids. **A:** 2nd day (the start day of corticosteroid); **B:** 7th day (on the 5th day of corticosteroid use); **C:** 10th day.

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where they reach to the correct diagnosis confirmed by histopathology but we have two concerns to avoid a wrong take home message from Samorano's paper. Firstly, the histopathological examination should not be the gold standard technique in the diagnosis of UM and secondly, the corticosteroid therapy will not be useful in the resolution of UM eruptions particularly in the occurrence of new skin lesions besides could worsen the concomitant disease.

Conflict of interest

The author has no conflict of interest to declare.

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References

1. Samorano LP, Fernandez VV, Valente NY, Arnone M, Nico MM, Rivitti-Machado MC, et al. Urticaria multiforme: two cases with histopathological findings. *Allergol Int* 2017;**66**:154–5.
2. Sempau L, Martín-Sáez E, Gutiérrez-Rodríguez C, Gutiérrez-Ortega MC. Urticaria multiforme: a report of 5 cases and a review of the literature. *Actas Dermosifiliogr* 2016;**107**:e1–5.
3. Shah KN, Honig PJ, Yan AC. Urticaria multiforme: a case series and review of acute annular urticarial hypersensitivity syndromes in children. *Pediatrics* 2007;**119**: e1177–83.
4. Starnes L, Patel T, Skinner RB. Urticaria multiforme—a case report. *Pediatr Dermatol* 2011;**28**:436–8.
5. Mathur AN, Mathes EF. Urticaria mimickers in children. *Dermatol Ther* 2013;**26**: 467–75.

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Author's response

We appreciated the relevant comments of Ercan *et al.* related to our manuscript¹ and also the case report they presented. Urticaria multiforme (UM) is a subtype of urticaria, but misdiagnosis can occur, mainly if the evaluation is made by non specialists.

Concerning our manuscript,¹ firstly, the case 1 was a 15-month-old boy with a 4-day history of urticarial plaques of fleeting nature, some with a violaceous center. He was initially evaluated by a non specialist that prescribed oral corticosteroid. Urticaria multiforme is a self-limited disease and it should be conducted by eliminating possible triggering factors and introducing oral anti-histamines in the majority of the patients. Oral steroid should be recommended only for refractory cases of UM.² In this context, the case presented

by Ercan *et al.* demonstrated oral steroid usually do not shorten the duration of UM.

Secondly, the diagnosis of urticaria multiforme can be made by clinical grounds and commonly it is not necessary to make complementary investigations. However, there are some differential diagnoses to be considered and histopathological examination can be helpful, substantially when the patients are evaluated by non specialists. The main differential diagnoses include erythema multiforme, serum-sickness-like reactions, urticarial vasculitis and acute hemorrhagic edema of childhood.^{2–4} The rarity of previous histopathological descriptions of UM^{2,4} was one of the main reasons for publishing our two cases. Some physicians have the concept that violaceous or purpuric or hyperpigmented lesions associated with urticaria must indicate the presence of cutaneous vasculitis. However, this is not observed in urticaria multiforme.

Finally, we emphasize that all physicians should be aware of urticaria multiforme. To know this disease will avoid unnecessary laboratory tests and also inadequate treatments.

Conflict of interest

The authors have no conflict of interest to declare.

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References

1. Samorano LP, Fernandez VV, Valente NY, Arnone M, Nico MM, Rivitti-Machado MC, et al. Urticaria multiforme: two cases with histopathological findings. *Allergol Int* 2017;**66**:154–5.
2. Sempau L, Martín-Sáez E, Gutiérrez-Rodríguez C, Gutiérrez-Ortega MC. Urticaria multiforme: a report of 5 cases and a review of the literature. *Actas Dermosifiliogr* 2016;**107**:e1–5.
3. Mathur AN, Mathes EF. Urticaria mimickers in children. *Dermatol Ther* 2013;**26**: 467–75.
4. Donnelly AF, Tackett B. What is your diagnosis? Urticaria multiforme. *Cutis* 2012;**89**:262e3.

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