

Images in Allergy

Yellow Urticaria

Özlem Akın Çakıcı, MD, Ozlem Aпти Sengün, MD, Selcen Hosgören Tekin, MD, and Andac Salman, MD *Istanbul, Turkey*

Yellow urticaria is a rare variant of urticaria infrequently reported in the literature. It usually occurs in the setting of chronic liver disease and associated hyperbilirubinemia. Here, we present 2 patients with typical features of yellow urticaria.

Case 1: A 72-year-old woman with cryptogenic cirrhosis and grade 2 hepatic encephalopathy was referred for an acute yellow-colored rash resolving within hours and recurring. She was on the third day of ceftriaxone treatment for a urinary tract infection. In addition to jaundice with ascites, dermatological examination revealed yellowish wheals over the thighs and buttocks, and yellow patches on the lateral aspects of the trunk corresponding to resolving wheals (Figure 1, A). Laboratory tests showed elevated direct and total bilirubin levels (total bilirubin, 17.4 mg/dL [0-1.3]; direct bilirubin, 9.12 mg/dL [0-0.3]). A diagnosis of yellow urticaria was made on the basis of history and typical clinical findings. Treatment with bilastine 20 mg/d for 3 days led to rapid improvement of the lesions without further recurrence.

Case 2: A 47-year-old man with hepatitis B virus–related acute hepatic failure presented with a 4-day-history of a pruritic, yellow eruption involving the forearms and legs (Figure 1, B). Lesions resolved within several hours. Laboratory tests revealed hyperbilirubinemia and elevated liver transaminases (total bilirubin, 9.98 mg/dL [0-1.3]; direct bilirubin, 6.52 mg/dL [0-0.3]). The patient was on treatment with tenofovir and ceftriaxone for 5 days. Physical examination showed raised yellow urticarial plaques on the right forearm and mild scleral icterus. Treatment with intravenous pheniramine maleate twice daily led to complete resolution of the lesions within a few days without recurrence.

A recent review of the literature revealed only 10 reported cases of yellow urticaria. Although 1 of the patients presented with acute hepatic failure due to acute hemorrhagic shock, the remaining patients had increased serum bilirubin levels associated with chronic liver dysfunction. The most frequent primary pathology was liver cirrhosis, with alcoholic cirrhosis being the most common type. All the patients were successfully treated with antihistamines, except for 1 patient who received systemic corticosteroids.¹

When the conjugation capacity of the liver decreases, or in the presence of increased bilirubin production exceeding the liver conjugation capacity or in biliary tract pathology, the increased bilirubin in blood can diffuse into tissues and accumulate, especially in the dermis. Capillary vasodilation and increased vascular permeability in urticaria may lead to exudation of plasma loaded with high amounts of bilirubin and excessive accumulation of bilirubin in the dermis, causing a more prominent bright yellow color of the lesions compared with the surrounding skin. Although urticaria plaques disappear within hours, the yellow color can persist for a few days because of high affinity of bilirubin for elastase.²

REFERENCES

1. Combalia A, Fusta X, Guilabert A, Mascaro JM Jr, Estrach T. Hyperbilirubinaemia: the common denominator of yellow urticaria. *J Eur Acad Dermatol Venereol* 2017;31:e533.
2. Patel SB, Mutasim DF. Yellow urticaria secondary to hyperbilirubinemia in a patient with end-stage liver disease. *Cutis* 2002;70:41-4.

Marmara University School of Medicine, Department of Dermatology, Istanbul, Turkey

Conflicts of interest: The authors declare that they have no relevant conflicts of interest.

Received for publication October 3, 2020; revised October 12, 2020; accepted for publication October 13, 2020.

Available online ■ ■

Corresponding author: Özlem Akın Çakıcı, MD, Marmara Üniversitesi, Pendik Eğitim ve Araştırma Hastanesi Dermatoloji Anabilim Dalı, Fevzi Cakmak Mah, Mimar Sinan Cad. No. 41, 34899 Pendik, Istanbul, Turkey. E-mail: ozlm_akin@hotmail.com.

J Allergy Clin Immunol Pract 2020;■:■-■.
2213-2198

© 2020 American Academy of Allergy, Asthma & Immunology
<https://doi.org/10.1016/j.jaip.2020.10.029>

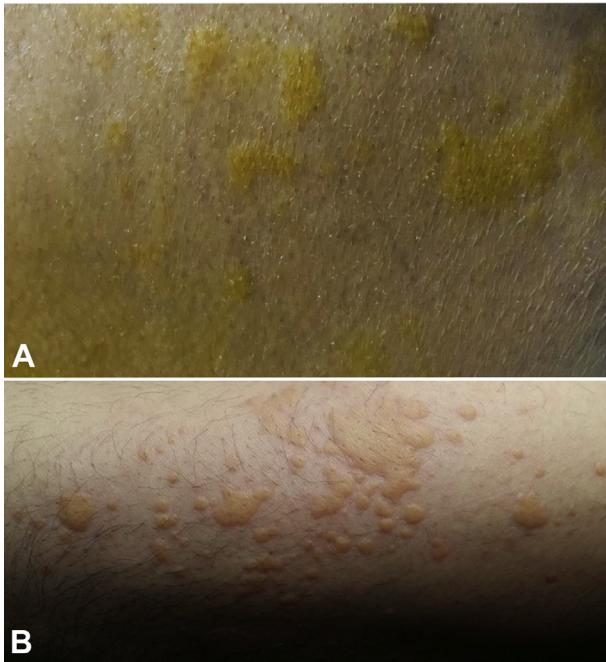


FIGURE 1. Yellow-colored, urticarial papules and plaques mainly involving the proximal extremities. Note that the (A) yellow color of the lesions is brighter compared with (B) skin with jaundice only.