

Images in Nephrology (Section Editor: G. H. Neild)

More than shingles

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A 66-year-old man who had end-stage renal disease and was undergoing maintenance hemodialysis presented with facial edema together with a strip of blisters and crust over the right side of his reddened forehead. Initially, the symptoms seemed indicative of herpes zoster ophthalmicus. However, his left periorbital area was more swollen than the infected right periorbital area (Figure 1A). The intense swelling of the eyelids prevented him from opening his eyes and compromised the visual field. The patient's dermatological history showed that he had had local tenderness and some tiny red papules over the right side of the forehead for several days. To control the zoster-related intractable neuralgia, he was administered a 3-day course of acetylsalicylate lysine (lysine aspirin, 500 mg, intravenously) at a local clinic during a 2-day interval between hemodialysis sessions right before his admission for the facial and periorbital edema.

After acetylsalicylate lysine therapy was withdrawn, the patient was administered a 2-day course of methylprednisolone (10 mg, intravenously, every 8 h) together with celecoxib, and the swelling subsided 2 days later (Figure 1B). Therefore, acetylsalicylate lysine-induced facial and periorbital angioedema were diagnosed.

The etiological factors of periorbital edema range from infectious/autoimmune disorders to malignancy/metabolic diseases [1]. However, aspirin-induced periorbital edema is rare. In the general population, the prevalence of aspirin sensitivity is 0.6–2.5%, and it classically manifests as respiratory reactions or urticaria/angioedema [2]. The main mechanism underlying aspirin-induced periorbital edema is believed to be related to increased microvascular permeability, which causes increasing interstitial fluid pressure in the periorbital dermis that may be even worse in patients without urine output. The management of patients with aspirin-induced periorbital angioedema mainly involves discontinuing the offending drug and avoiding excessive ultrafiltration in hemodialysis. Cyclooxygenase-2-selective non-steroidal anti-inflammatory drugs could be a reasonable alternative choice of therapy in such cases [3].

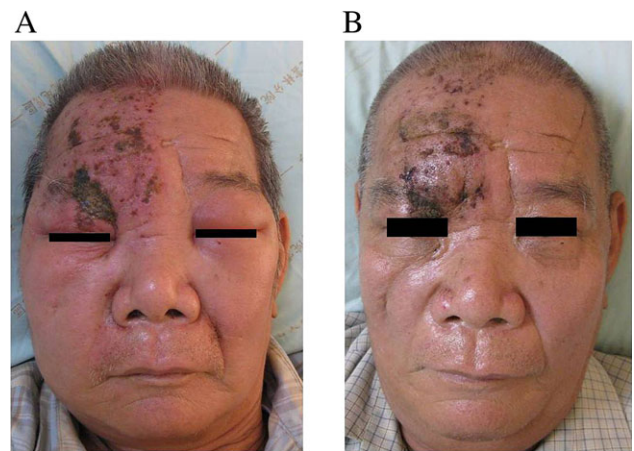


Fig. 1. (A) A strip of blisters and crust extended from the right side of the forehead to the eyebrow, over the face of a 66-year-old man; the area involved the dermatome of the ophthalmic branch of the trigeminal nerve. Bilateral periorbital edema was also noted. (B) The facial edema subsided 2 days after discontinuing acetylsalicylate lysine.

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References

1. Rafailidis PI, Falagas ME. Fever and periorbital edema: a review. *Surv Ophthalmol* 2007; 52: 422–433
2. Szczeklik A, Sanak M, Nizankowska-Mogilnicka E *et al.* Aspirin intolerance and the cyclooxygenase-leukotriene pathways. *Curr Opin Pulm Med* 2004; 10: 51–56
3. Knowles SR, Drucker AM, Weber EA *et al.* Management options for patients with aspirin and nonsteroidal antiinflammatory drug sensitivity. *Ann Pharmacother* 2007; 41: 1191–1200

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