

atrophoderma of Pasini and Pierini, morphea profunda, and linear scleroderma. Regarding progressive systemic sclerosis, renal disease accounts for early mortality, but pulmonary disease is the most substantial long-term cause of morbidity and mortality. Treatment techniques have included physical therapy, avoidance of cold and smoking, vasodilating drugs, cyclophosphamide, methotrexate, and phototherapy.¹ Hematopoietic stem-cell transfusion is still experimental, and initial attempts were associated with nearly 10% to 20% mortality.² Currently, 3 ongoing randomized trials are investigating the use of autologous transplants for scleroderma.³

Vitiligo has been reported to occur after allogeneic bone-marrow transplant,⁴ in response to melanoma, and after lymphocyte infusions from patients with known vitiligo. We know of no reports of vitiligo occurring after autologous bone-marrow transplants. Regarding vitiligo after allogeneic bone-marrow transplant, T cells have been implicated, either by direct transfer from the donor or de novo creation of melanocyte-specific T cells.^{4,5}

In the case of our patient, it seems unlikely that autogeneic transplant was the cause of his vitiligo and more likely that either the patient's immunosuppressive medications or his underlying propensity for autoimmune disease were the inciting factors for the developments of his vitiligo. A third possibility is that vitiligo is a cutaneous phenotype of chronic GVHD (in addition to scleroderma-like and lichen planus-like eruptions) that is as yet unreported. Although rare, there are a few reports of scleroderma and vitiligo occurring simultaneously.⁶ Though the coexistence of these 2 diseases in the same patient could be merely coincidental, the proposed autoimmune nature of both diseases might suggest a relationship between them.

Scott Worswick, MD
Aslan Pirouz, BS
Delphine J. Lee, MD, PhD

Author Affiliations: Division of Dermatology, David Geffen School of Medicine at the University of California, Los Angeles.

Correspondence: Dr Worswick, Division of Dermatology University of California, Los Angeles, 200 Medical Plaza, Ste 450, Los Angeles, CA 90095 (sworswick@mednet.ucla.edu).

Financial Disclosure: None reported.

1. Calguneri M, Apras S, Ozbalkan Z, et al. The efficacy of oral cyclophosphamide plus prednisolone in early diffuse systemic sclerosis. *Clin Rheumatol*. 2003;22(4-5):289-294.
2. Binks M, Passweg JR, Furst D, et al. Phase I/II trial of autologous stem cell transplantation in systemic sclerosis: Procedure related mortality and impact on skin disease. *Ann Rheum Dis*. 2001;60:577-584.
3. Milanetti F, Bucha J, Testori A, Burt RK. Autologous hematopoietic stem cell transplantation for systemic sclerosis. *Curr Stem Cell Res Ther*. 2011;6(1):16-28.
4. Alajlan A, Alfadley A, Pedersen KT. Transfer of vitiligo after allogeneic bone marrow transplantation. *J Am Acad Dermatol*. 2002;46(4):606-610.
5. Cathcart S, Morrell D. Vitiligo as a post-bone marrow transplantation complication. *J Pediatr Hematol Oncol*. 2007;29(7):485-487.
6. Bonifati C, Impara G, Morrone A, Pietrangeli A, Carducci M. Simultaneous occurrence of linear scleroderma and homolateral segmental vitiligo. *J Eur Acad Dermatol Venereol*. 2006;20(1):63-65.

Aquagenic Urticaria and Syncope Associated With Occult Papillary Thyroid Carcinoma and Improvement After Total Thyroidectomy

Report of a Case. A 25-year-old atopic Turkish woman presented with a 6-month history of widespread, slightly elevated, pruritic red plaques over her face, trunk, and extremities occurring each time after prolonged contact with water of any temperature. Skin biopsy findings were consistent with urticaria. Bathing exceeding 20 to 30 minutes always resulted in syncope followed by spontaneous recovery in 30 minutes. Angioedema or respiratory symptoms did not occur. While sweating, producing tears, drinking water, or washing hands for a short duration did not provoke lesions, washing dishes by hand induced localized lesions. No spontaneous attacks of syncope were reported. None of the family members were similarly affected.

Focal and systemic infections and autoimmune and other systemic diseases were ruled out. The human immunodeficiency virus antibody test result was negative. Neurologic and cardiovascular investigations revealed no other causes of syncope. Challenge tests with hot, ice-cold, and room-temperature water led to urticarial plaques within 20 minutes (**Figure 1A**). Exposure to heated air from an electric hair dryer at 40°C for 2 minutes resulted in localized urticarial plaque within 10 minutes. Cold urticaria (tested with an ice cube inside a plastic

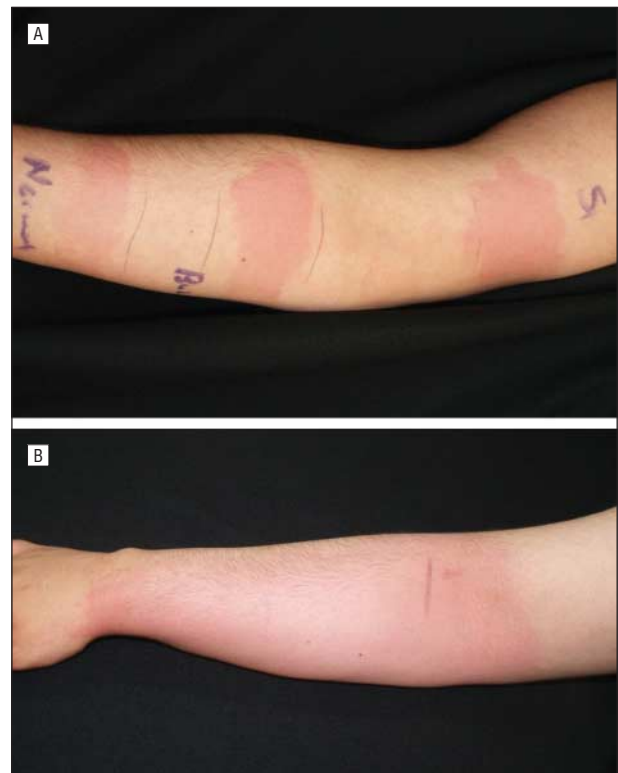


Figure 1. Clinical images of the forearm. A, Positive challenge tests with hot (40°C), ice-cold, and room-temperature water on the forearm within 20 minutes. B, Bicarbonated water (500 g/50 L) immersion test led to pruritic and burning edematous plaque within 2 hours.

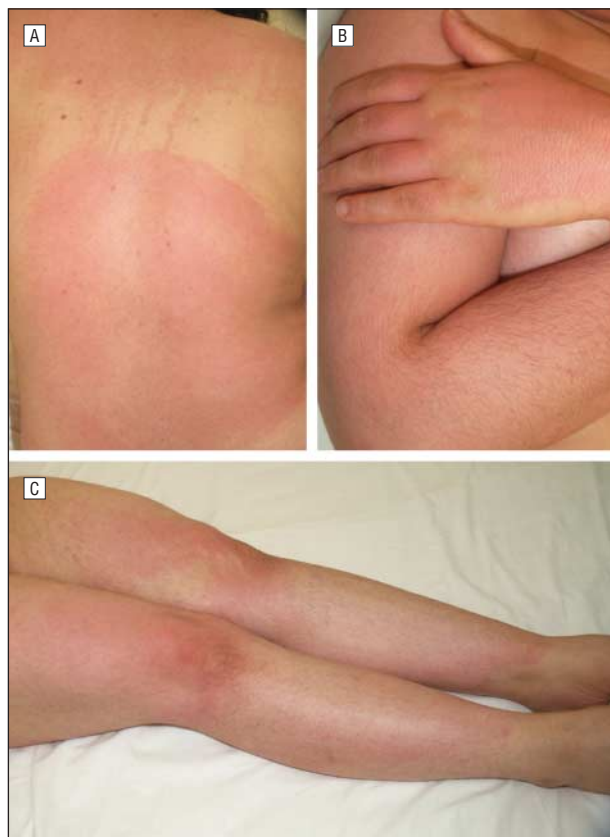


Figure 2. Delayed onset of pruritic erythema on the trunk (A), upper extremities (B), and lower extremities (C). Reactions occurred 2 hours after a 5-minute bath with bicarbonated water during combined therapy with oral antihistamines and narrowband UV-B. Attacks of syncope could be prevented by combined intervention.

bag for 10 minutes), cholinergic urticaria, and dermatographism were absent. Combined treatments with antihistamines (ie, oral hydroxyzine, desloratadine, rupatadine, or parenteral pheniramine at high doses), narrowband UV-B, shortening the bathing time to less than 5 minutes, and alkalizing of bath water (pH 8-9) by adding sodium bicarbonate (500 g/50 L) were partially effective (Figure 1B and **Figure 2**).

Thyroid function test results and autoimmune markers were normal. Thyroid ultrasonography revealed a 12-mm isoechoic, solid nodule in the left lobe of the thyroid gland. Fine-needle aspiration biopsy findings were consistent with papillary carcinoma of the thyroid. The patient underwent total thyroidectomy. Only mild erythema occurred following the first postoperative bathing. Treatment with all medications was stopped, and the patient was free of lesions at 6-month follow-up.

Comment. Large urticarial plaques, involvement of the entire body, and accompanying heat-induced urticaria as in this case are extremely rare in aquagenic urticaria. Aquagenic urticaria leading to syncope is a very unusual finding reported in infants and children.^{1,2} Bronchospasm might occur.³ Hematologic, lymphoproliferative, infectious, and neoplastic diseases have been reported mainly in conjunction with aquagenic pruritus,⁴ a condition in the same spectrum as aquagenic urticaria. However, the etiologic role of the underlying disease often remains obscure.

Recently, 4 adult cases of chronic urticaria with occult papillary carcinoma of the thyroid have been reported.⁵ Similar to our case, prompt resolution of the urticarial lesions was achieved following total thyroidectomy. To our knowledge, this is the first report of an adult case of aquagenic urticaria and syncope associated with occult papillary thyroid carcinoma showing dramatic response to total thyroidectomy. Despite the lack of any clinical or laboratory hints for performing a thyroid ultrasonography, its role in unraveling this challenging case was of inestimable worth.

Esen Özkaya, MD
Meryem Sevinç Elinç-Aslan, MD
Sezen Yazıcı, MD

Author Affiliations: Department of Dermatology, Istanbul Medical Faculty, Istanbul University, Istanbul, Turkey.

Correspondence: Dr Özkaya, Department of Dermatology, Istanbul University, 34093 Istanbul, Turkey (profeo@istanbul.edu.tr).

Financial Disclosure: None reported.

1. Nechay A, Stephenson JB. Bath-induced paroxysmal disorders in infancy. *Eur J Paediatr Neurol*. 2009;13(3):203-208.
2. Shamir K, Browne G, Beltrani V, Bielory L. Temperature-dependent, aquagenic urticaria/anaphylaxis. *J Allergy Clin Immunol*. 2006;117(2)(suppl):S124.
3. Luong KV, Nguyen LT. Aquagenic urticaria: report of a case and review of the literature. *Ann Allergy Asthma Immunol*. 1998;80(6):483-485.
4. Heitkemper T, Hofmann T, Phan NQ, Ständer S. Aquagenic pruritus: associated diseases and clinical pruritus characteristics. *J Dtsch Dermatol Ges*. 2010;8(10):797-804.
5. Manganoni AM, Tucci G, Venturini M, Farisoglio C, Baronchelli C, Calzavara Pinton PG. Chronic urticaria associated with thyroid carcinoma: report of 4 cases. *J Invest Allergol Clin Immunol*. 2007;17(3):192-195.

Chronic Acyclovir-Resistant HSV-2 Ulcer in an Immunosuppressed Patient Treated With Topical Cidofovir

Report of a Case. A 66-year-old man with mantle cell lymphoma, status post allogeneic stem cell transplant (SCT), presented with a nonhealing perianal ulcer positive for herpes simplex virus type 2 (HSV-2). Pre-transplant laboratory findings included HSV-2 IgG, and he had received acyclovir for prophylaxis at the time of transplant.

On posttransplant day 23, he developed graft-vs-host disease and was given prednisone, mycophenolate, and cyclosporine. One month later, he developed a painful HSV-2-positive perianal ulcer (**Figure 1**). He had mild symptomatic relief but no visible healing while receiving treatment-dose valacyclovir. The HSV was identified as acyclovir resistant, and he began treatment with intravenous foscarnet. Treatment was subsequently suspended owing to an increase in creatinine concentration from 1.00 to 1.92 mg/dL over 2 weeks.

While being treated with foscarnet, the patient reported decreased pain, but the ulcer remained clinically stable. Because of his elevated creatinine level and the risk for further nephrotoxic effects with intravenous cidofovir, the patient was treated with topical cidofovir, 2%, ointment applied twice daily for 3 weeks. He expe-