A case-based update

Chronic Urticaria:
Scratching the Surface

Karen Binkley, MD, FRCPC

Liz, 48, presents with a rash of two months' duration. The rash consists of red, raised, itchy papules. The individual lesions last less than 24 hours and heal without residual bruising or flaking. There are no associated respiratory symptoms. Over-the-counter antihistamines give her partial relief.

Two weeks before the onset of the rash, she had been travelling in Thailand and had developed a respiratory illness, for which she received cefaclor. Although the respiratory illness resolved, she has had troublesome abdominal discomfort with bloating and frequent loose stools. During her trip, she had a sexual encounter. Her partner did not use a condom.

She has been noticing increasing fatigue since her return and has started taking various herbal supplements to "boost her immune system".

In > 90% of chronic urticaria cases, no specific cause can be identified.

Her family history is remarkable for a mother and sister with Hashimoto's thyroiditis. Her mother also developed breast cancer at age 55 and an aunt developed colon cancer at age 51.

The patient's physical exam is unremarkable, except for a slightly enlarged thyroid and urticarial papules that blanch with pressure.

You suspect:

a) Viral illness associated with chronic urticaria
b) Parasitic infection associated with chronic urticaria
c) Sexually acquired hepatitis B, C, and/or HIV associated with chronic urticaria
d) Autoimmune thyroiditis associated with chronic urticaria
e) Cefaclor-associated chronic urticaria and possible serum sickness-like reaction
f) Internal malignancy associated with chronic urticaria.
g) All of the above

Table 1

Underlying causes of chronic urticaria

- Infection
- Autoimmune disorder
- Thyroid disease
- Connective tissue disorder
- Medication use

Answer: *All of the above*

This patient has chronic urticaria, by definition being longer than six weeks in duration. Table 1 lists possible underlying causes. Very rarely, malignancy can be associated with chronic urticaria. In > 90% of cases, however, no specific cause can be identified, but the process represents a low-grade autoimmune process with IgG antibodies directed against mast cell components.

This patient has several potential causes for her chronic urticaria, as outlined. Blood work to screen for hepatitis B and C, and for HIV are obtained, along with thyroid function tests. Stool samples are sent for ova and parasites. The patient is referred for screening colonoscopy. Furthermore, because she had not been compliant with regular Pap and breast exams, these are also arranged.

Skin testing is often an unreliable diagnostic technique when patients have chronic urticaria, as these individuals may be dermatographic.

Allergy skin prick tests to inhalants and foods are not performed; chronic urticaria is generally not an immunoglobulin E-mediated process. In addition, skin testing is often unreliable when patients have chronic urticaria, since they are frequently dermatographic.

All of Liz's investigations are unremarkable. Her symptoms are controlled with a combination of H1 and H2 blockers.

Within six months, these medications are successfully discontinued and there is no recurrence of symptoms. Once she is free of urticaria and off all antihistamines for several weeks, penicillin skin testing and oral challenge, followed by a separate cefaclor challenge are negative.

The patient is felt to have had chronic urticaria, likely to due to a viral illness that had resolved. She is informed that this might recur, particularly with future viral illnesses. Dx

Dr. Binkley is an assistant professor of medicine, division of clinical immunology and allergy, University of Toronto, and a staff member, St. Michael's Hospital and Sunnybrook and Women's Health Sciences Centre, Toronto, Ontario.