

Ultraviolet Light Therapy in Chronic Urticaria

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Fifteen patients with chronic urticaria were treated with ultraviolet light B (UVB) for 1-3 months during the spring 1984 and a follow-up study was performed in November 1984-January 1985. Patients with cold urticaria, cholinergic urticaria and dermographism became clearly better or got rid of their symptoms more often than those with "non-specific" chronic urticaria. The good results achieved during the phototherapy held during the summer but in the autumn urticaria became worse in one third of the cases. The result suggests that UV-therapy might be worth trying in many patients with chronic urticaria. *Key words: Chronic urticaria; Ultraviolet light; Phototherapy.* (Received January 30, 1985.)

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Climate therapy has been found to reduce or even do away with the symptoms of chronic urticaria (1). In addition to sunlight, there are several other factors influencing the result, e.g. changes in diet, less stress, and an altered allergenic milieu. We have treated patients suffering from chronic urticaria with ultraviolet light (UVL), and report the results here.

PATIENTS

There were 11 females and 4 males with a mean age of 31.5 years (range 14-62 years) who had suffered from chronic urticaria already for 1-9 years (mean 3.4 years). There were 6 patients with dermographism, 4 with cholinergic urticaria, 2 with generalized cold urticaria, and 3 with non-specific chronic urticaria.

METHODS

In the spring of 1984, 13-27 (mean 22) treatments were given to the patients within 25-130 (mean 60) days. During the first month, treatment was given three times a week, and after that once a week to the end of May 1984.

The UVL source was Waldmann UV 6002®, which can be regarded as a UVB emitter. The first dose was 0.02 J/cm² and the dose was gradually increased to a mean of 0.4 (range 0.08-0.7) J/cm².

The symptoms and signs as well as the need of antihistamines were recorded 4 times, namely before the UVL treatment, after one month, at the end of May, and again in November 1984-January 1985. The result was considered to be excellent when the patient had no symptoms and did not take antihistamines any more, good, if the need of antihistamines was one third or less of the amount needed before the therapy, and poor when there was no response or the symptoms had diminished only slightly.

RESULTS

Seven out of 15 patients were free from symptoms just after the UVL therapy, but 4 patients had gained no benefit from the treatment (Table I). During the following summer, only one patient reported a slight change in her condition (Table II) but during the autumn months urticaria became worse in 5 out of the 15 patients. Patients with cold and cholinergic urticarias seemed to respond best to the UVL therapy. One of the two patients with cold urticaria was a 14-year-old boy who got severe symptoms before the treatment when swimming in an indoor swimming pool with fairly warm water (25°C). During the light therapy he used a pointed cap sheltering his earlobes, and after a month's therapy the only skin areas still reacting to the water were the earlobes.

Table I. Results of ultraviolet light therapy in 15 patients with chronic urticaria after 13–27 (mean 22) treatments

Type of urticaria	No. of cases	Result ^a		
		0	+	++
Dermographism	6	1	3	2
Cholinergic urticaria	4	0	1	3
Cold urticaria	2	0	0	2
"Non-specific" urticaria	3	3	0	0
Total	15	4	4	7

^a 0 = No or slight response, + = clearly better, ++ = excellent result.

DISCUSSION

UVL is beneficial in several diseases, e.g. in atopic dermatitis and in other itching conditions (2–4), but the mechanism is so far obscure. Chronic and recurrent urticarias disappear spontaneously, and the 3.8-year-cure rate in a Finnish material (5) was only 45–50%. Keeping this in mind, the fairly good results of our non-controlled study give us a hint that UVL therapy might be worth trying especially in patients with cold urticaria, cholinergic urticaria, and dermatographism but not in those with "non-specific" chronic urticaria. Further studies on the effect of UVL and the optimal mode of treatment are warranted.

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Table II. Ultraviolet light (UVL) therapy in chronic urticaria—Follow-up of 15 patients 6–7 months after the discontinuance of the therapy

Result of UVL therapy in the spring 1984	No. of cases	Symptoms during the summer 1984 ^a			Symptoms in the autumn 1984 ^a		
		+	0	–	+	0	–
Excellent	7	0	7	–	2	5	–
Good	4	0	3	1	1	2	1
Poor	4	0	4	0	2	2	0
Total	15	0	14	1	5	9	1

+ = Symptoms increased, 0 = no change in the amount of wheals and flares, – = further decrease of symptoms.