

Effectiveness of phototherapy in chronic urticaria

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Bishnoi and colleagues present the results of a randomized controlled trial (RCT) of the effect of narrowband ultraviolet B (NB-UVB) or psoralen plus ultraviolet A (PUVA) phototherapy on antihistamine-refractory corticosteroid-dependent chronic spontaneous urticaria (CSU).¹ Fifty patients with CSU out of 526 consecutively screened patients with chronic urticaria were randomized to receive either NB-UVB or PUVA in addition to licensed doses of antihistamines for 90 days. The randomized patients were on average ~35 years old, predominantly female and had an average duration of disease of more than 3 years. The patients had severe CSU indicated by an average urticaria activity score (UAS) of 5.0 and 4.9 points, respectively, in the NB-UVB and PUVA groups (the UAS ranges from 0 to 6 points with 6 indicating severe debilitating itch interfering with daily activities and sleep; and more than 50 wheals per day).

After treatment for 90 days with either NB-UVB or PUVA, the UAS (primary endpoint) decreased statistically significantly to an average of 1.4 in the NB-UVB group and 1.9 in the PUVA group (P-value for difference in change between groups = 0.022). The change in both groups exceeded the recognized threshold for a clinically meaningful change in UAS estimated from previous studies and is comparable with the reduction in UAS observed in pivotal clinical trials of omalizumab [anti-immunoglobulin (Ig) E] for CSU.² The change in UAS during the treatment period was mirrored by a statistically significant improvement in overall patient satisfaction and the outcome scoring scale in both groups. The reduction in symptoms was maintained in both groups during a 90-day post-treatment observation period with only one relapse in the NB-UVB group. Interestingly, the study found statistically significant decreases in serum total IgE and number of patients with a positive autologous serum skin test during the treatment. This is a novel finding, which merits further research into the possible mechanisms by which phototherapy exerts its effect in CSU.

There is a paucity of RCTs in antihistamine-refractory CSU. However, the shortcomings of this study are the lack of a pre-specified power calculation and inclusion of a control group, which would have enabled a more rigorous evaluation of the placebo-deducted effect of phototherapy in CSU. To this end, the study provides no new knowledge compared with a previous smaller RCT, which also compared NB-UVB with PUVA for CSU³ and to an RCT that evaluated NB-UVB additionally to antihistamines in CSU.⁴ Also, a longer follow-up time and an active comparison with one of the recommended drugs for

CSU, such as omalizumab, would have been desirable. Furthermore, the effect of phototherapy on angio-oedema, which is reported by up to 40% of patients with CSU, is not dealt with in detail in this study and is a possible limitation of this treatment modality. However, because in many developing countries omalizumab is not part of the armamentarium, and also, because long-term use of ciclosporin is associated with severe side-effects, phototherapy is a treatment option worth considering for a subset of patients with refractory CSU.

Conflicts of interest

None to declare.

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The correlation between clinical and histological clearance of actinic keratoses

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Actinic keratosis (AK) is considered a potential precursor of invasive squamous cell carcinoma (SCC) and therefore it has been advocated that the entire 'field' at risk be treated to reduce the development of SCC.^{1,2} Numerous studies using different topical therapeutic agents (5-fluorouracil,