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Phototherapy as a treatment of early-stage mycosis fungoides and predictive factors for disease recurrence: A 17-year retrospective study

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Background: Mycosis fungoides (MF) can be described as the most common form of cutaneous T-cell lymphoma (CTCL). NB-UVB and PUVA are effective treatment options, but the studies of their treatment efficacy and disease relapse still limited.

Objective: (1) to determine the efficacy of NB-UVB and PUVA as treatment for early stage MF and explore the predictive factors for complete remission and (2) to explore the relapse rate and analyze their predictive factors, including the utility of maintenance therapy.

Methods: A retrospective cohort study of 61 patients with early stage MF (IA-IB) treated with NB-UVB or PUVA as a first line therapy from January 2002 to December 2018 at the Division of Dermatology, Ramathibodi Hospital, Bangkok, Thailand. Cox regression analysis and Kaplan-Meier survival curve were performed for the main outcomes.

Results: Fifty-seven (93.5%) patients achieved a complete remission. Median time to remission was 7.80 $\pm$ 0.27 months. Types of phototherapy (NB-UVB or PUVA), age and gender did not associate with remission rate, while presence of poikiloderma and higher disease stage prolonged time to remission. The prevalence of relapse was 50.8%. Median time to relapse was 24.78 $\pm$ 5.48 months. In patients receiving phototherapy during the maintenance period, the treatment duration longer than 6 months, cumulative dose $\geq$10 KJ/cm^2, and cumulative session $\geq$25 sessions were associated with a significantly longer relapse-free interval (RFI).

Conclusions: NB-UVB and PUVA are effective treatment options for early stage MF. Maintenance treatment by phototherapy at least 6 months seem to prolong remission.

Commercial disclosure: None identified.

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Efficacy of ALA-PDT in the treatment of actinic keratoses on the upper extremities: A post hoc analysis of a phase 3, randomized, vehicle-controlled trial

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Aminolevulinic acid (ALA) 20% solution photodynamic therapy (PDT) is indicated for targeted treatment of actinic keratosis (AK) on the face, scalp, and upper extremities. In a phase 3 study of 135 subjects (NCT02137785), ALA 20% solution—PDT at baseline and week 8 using lesion-targeted treatment and a 3-hour occluded incubation was superior to vehicle (VEH)—PDT for AK clearance of the upper extremities. Results of that study assessed response of the entire field to treatment, including new AKs present at follow-up, in calculations of clearance rates. This ancillary analysis assesses treated AKs only, since treatment was delivered as targeted treatment rather than field-directed. Analyses include mean AK clearance rate compared with baseline, cumulative disease area clearance and subgroup analysis of complete clearance rate by lesion size. The mean AK clearance rate for ALA-treated lesions of all sizes was 81% at 12 weeks (after up to two treatments), compared with 45% for lesions receiving VEH (P 36 mm^2 in size, respectively. Mean cumulative disease area at baseline was 149 mm^2 and 154 mm^2 for ALA and VEH-treated AKs respectively; 82% of the cumulative disease area was cleared at week 12 after ALA-PDT compared with 43% after VEH-PDT. ALA-PDT resulted in high clearance rates of treated AKs, including good response of large AKs and high mean cumulative area clearance rates.

Commercial disclosure: This study was supported by DUSA Pharmaceuticals.

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Brigham Eyelash Tool for Alopecia (BELA): A reliable assessment of eyelash alopecia areata

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Background: Currently, there are no standard assessments to evaluate eyelash involvement in patients with alopecia areata (AA). Such a tool is needed to monitor disease progression, improvement, and response to treatment in patients with AA with eyelash alopecia. In this study, we developed and assessed the reliability of the Brigham Eyelash Tool for Alopecia (BELA) as a quantitative measure of eyelash AA.

Methods: BELA is calculated using distribution and density of eyelashes present on the top eyelid. Sixty images of patients with varying degrees of eyelash AA hair loss during their treatments were distributed to four board-certified dermatologists from two academic medical centers for review. Each reviewer used standardized instructions and examples to independently evaluate the photos. The photos included a range of hair loss from complete absence of eyelash hair to full density of eyelashes, and were presented in a random order.

Results: The BELA demonstrated high inter-rater (ICC = 0.84, CI 0.78-0.90) and high intrarater (ICC = 0.85, CI 0.79-0.90) reliability.

Conclusions: Our data suggest that BELA is a reliable assessment that provides a standardized, quantitative method to evaluate eyelash AA. BELA scores are simple to calculate, and therefore feasible for clinical practice, clinical trials, and research settings. We hope that BELA will be investigated in other etiologies of eyelash alopecia to monitor disease progression, improvement, and response to treatment. Future studies for continued validation of BELA are needed.

Commercial disclosure: None identified.

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A survey of dermatologists' preparedness for natural and man-made disasters

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Natural and manmade disasters cause numerous dermatologic manifestations, such as secondary infections after a flood or irritation from blistering agents used in chemical warfare, requiring diagnostic acumen and management strategies. However, little is documented on the extent of dermatologists' training on/about disaster situations. Therefore, this study sought to evaluate dermatologists' preparedness for disasters and perceptions about the importance of disaster training. Of 1677 emailed, 256 completed the survey (n = 14 without, MDs/DOs were excluded; n = 242). Only 28.9% received training in disaster preparedness; based on chi-square tests, the likelihood of training did not significantly vary by practice type, age, or residency status. The majority of trained respondents would be comfortable caring for patients affected by natural events (78.2%), intentional chemical exposures (52.7%), and natural biological events (50.9%), but fewer were comfortable with unintentional chemical exposures (47.3%), intentional biological attacks (34.6%), and nuclear/radiological injuries (16.4%). Encouragingly though, 74.7% reported that disaster preparedness should be part of dermatology training. Among the 25% who felt disaster preparedness should not be included in residency training, the most common reasons were that it is not important and they have other educational priorities. These data show that a large percentage of dermatologists have not received disaster training. Even with training, many still feel ill-prepared to manage patients affected by disasters, especially nuclear/radiologic events, demonstrating that the dermatology community is likely inadequately prepared for a disaster. Yet, 75% reported that disaster preparedness should be part of dermatology training, highlighting the need and desire for a formal disaster training program.

Commercial disclosure: None identified.