

Pruritus Differences Between Psoriasis and Lichen Planus

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Sir,

Patients experience of itch is not just a matter of quantity but also of quality. A recent report on itch quality in atopic dermatitis and psoriasis (1) highlights relevant differences in clinical manifestation of pruritus between patients with these two different skin diseases. According to the usual classification of pruritus (2), itching in both diseases can be defined as dermatological pruritus. However, the results of O'Neill et al. (1) clearly indicate that the perception of pruritus can vary greatly between various skin diseases, suggesting that itching is not just a simple feeling provoking scratching, but may represent a group of closely related sensations with different receptors, mediators and neuronal pathways. To further support this hypothesis we report here our data on significant differences in pruritus between lichen planus (LP) and psoriasis.

MATERIAL AND METHODS

The study included 30 patients with LP (21 females, 9 males; mean age 55.2 ± 10.4 years) and 76 subjects with psoriasis (34 females, 42 males; mean age 45.2 ± 14.4 years). A specially designed questionnaire containing demographic and clinical data was completed for each subject, based on detailed anamnesis and careful physical examination. The severity of pruritus experienced within the last week was evaluated by study participants using a 10-point visual analogue scale (VAS).

RESULTS AND DISCUSSION

The majority of patients in both groups experienced pruritus (LP: 96.7% of patients; psoriasis: 90.8% of patients; $p=0.53$). However, individuals with LP experienced significantly more severe pruritus than did subjects with psoriasis (mean VAS: 7.5 ± 2.3 points vs. 5.1 ± 2.5 points, respectively, $p < 0.001$). Despite pruritus being more severe in LP, excoriations were observed slightly more commonly in psoriasis (LP: 37.9%, psoriasis: 52.9%, $p=0.26$). Patients with LP commonly experienced the most severe pruritus during the appearance of new skin lesions (LP: 55.2% vs. psoriasis: 14.9%; $p < 0.001$), while the intensity of pruritus in psoriasis usually increased during the extension of skin involvement (psoriasis: 44.8% vs. LP: 3.4%; $p < 0.001$) (Fig. 1A). On the other hand, pruritus in LP most frequently subsided shortly after anti-LP treatment initiation (60.0%), whereas in psoriasis it usually disappeared only when all skin lesions were resolved (53.8%) ($p < 0.001$) (Fig. 1B). There were also some differences in the localization of pruritus. LP patients reported slightly more itch on the

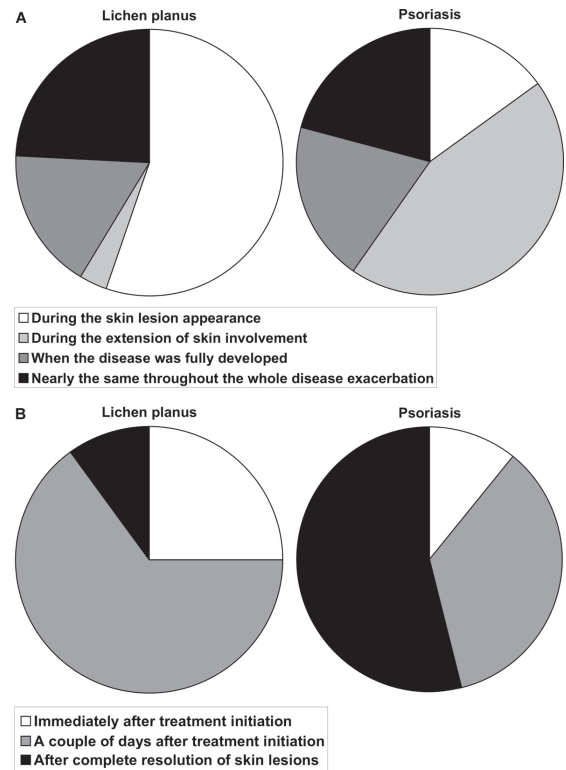


Fig. 1. (A) Comparison of the most intensive pruritus during various phases of disease exacerbation in lichen planus and psoriasis ($p < 0.001$). (B) Comparison of the time of pruritus resolution between lichen planus and psoriasis ($p < 0.001$).

upper extremities (58.6% vs. 52.9%, $p=0.61$) and, in contrast, psoriatic patients reported more itch on the lower extremities (70.6% vs. 51.7%, $p=0.08$) and the trunk (66.2% vs. 48.3%, $p=0.1$). Furthermore, patients with

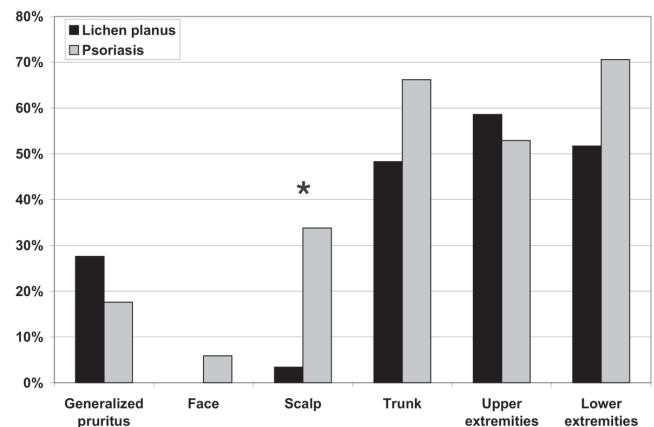


Fig. 2. Comparison of localization of pruritus in lichen planus and psoriasis ($*p < 0.05$).

psoriasis, compared with patients with LP, significantly more frequently experienced itching of the scalp (33.8% vs. 3.4%, respectively; $p < 0.01$) (Fig. 2). A generalized itching was noted in both groups with similar frequency: in 8 (27.6%) patients with LP and in 12 (17.6%) patients with psoriasis ($p = 0.4$). The majority of patients in both groups reported pruritus limited to skin lesions (LP: 75.9%, psoriasis: 75.0%, $p = 0.93$).

Although our results may be limited by the relatively small group of patients with LP ($n = 30$), we believe that they are of importance, as, in contrast to atopic dermatitis (3, 4) or psoriasis (5, 6), data on the clinical manifestation of pruritus in LP are lacking.

In conclusion, significant differences in pruritus manifestation exist between various dermatological conditions. We believe that these data, in line with O'Neill et al.'s report (1), may suggest a complex and distinct pathogenesis of dermatological pruritus in different skin diseases. Further research into this aspect of pruritus will help us better to understand the pathogenesis of itch.

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