

## Treatment of Lichen Simplex Chronicus with Topical Capsaicin Cream

Sir,

We read with interest the report by Tupker et al. (1) on the treatment of prurigo nodularis, chronic prurigo and neurodermatitis circumscripta with capsaicin cream. The authors appropriately point out the limitations of an open study. We performed a double-blind placebo-controlled clinical trial on the use of topical capsaicin cream in lichen simplex chronicus.

### MATERIALS AND METHODS

Seven patients with bilateral lesions of lichen simplex chronicus participated in the 6-week study. Capsaicin 0.075% cream and vehicle are provided in unlabeled tubes by GenDerm Corporation, Lincolnshire, IL. After informed consent, forms were signed and patients applied creams labeled "A" to a clinical lesion designated "A" and medication "B" to a second distinct lesion designated "B". Patients were instructed to apply the cream four times daily, and precautions were taken to avoid application to mucous membranes and eroded areas. Skin biopsies were obtained from each lesion prior to treatment. Clinical photographs were taken at each session and patients indicated their degree of itching using a visual analog scale. They were also questioned concerning their preference for either cream. Clinical evaluation was determined at each visit, and the degree of erythema, lichenification and scale was graded from 0 to 4+.

### RESULTS

At 2 weeks, all patients had improvement of their itching at the site where the active drug was applied. However, placebo-treated sites showed similar degrees of improvement in visual analog scores for itching. At 4 weeks data were available only on 5 patients, and although there was an improvement from baseline in the site treated with active drug in 4 of the 5 patients, no difference was apparent when compared to placebo. At 6 weeks data were available on 3 of 7 patients and no difference between active drug and placebo for itching scores was apparent. In fact, itching was described as worse in the site where active drug was applied.

For the clinical features that were measured, namely erythema, lichenification and scale, no difference was seen between active drug and placebo at 2, 4 or 6 weeks of treatment. All but one patient refused post-treatment skin biopsies. In this single patient, consent was given for biopsy of only one treatment site, which was later determined to be the placebo-treated area. Nevertheless, histology confirmed the clinical diagnosis of lichen simplex chronicus in all cases.

### DISCUSSION

There is interest in a non-steroidal topical alternative for treatment of lichen simplex chronicus. With the preliminary findings of Tupker et al. concerning the benefit of capsaicin for treatment of localized pruritus, as well as previous reports which have shown capsaicin to be beneficial for notalgia paresthetica (2), brachioradial pruritus (3), pruritus related to hemodialysis (4), and aquagenic pruritus (5), we were hopeful that capsaicin would fulfill such a role. In our small, but placebo-controlled double-blind study, 3 of the 7 patients preferred placebo, one preferred the active drug, and 3 had no preference. We could not demonstrate a difference in pruritus scores using a visual analog scale between capsaicin-treated and placebo-treated sites. Our objective clinical evaluation also did not show a difference between medication and placebo. Unfortunately, our patients refused post-treatment biopsies, so that histologic changes between drug- and placebo-treated sites could not be determined.

We are aware that our study contains only a small number of patients, but because it was blinded and placebo-controlled, we feel that the benefit of capsaicin cream for localized chronic pruritic disorders is still questionable. We would encourage others to report their experience with capsaicin cream, so that its role in the treatment of chronic localized pruritic disorders can be further defined.

### REFERENCES

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*Accepted September 1, 1995.*

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