AUTOIMMUNE BULLOUS DISEASES

A RETROSPECTIVE STUDY: APPLICATION SITE PAIN WITH THE USE OF CRISABOROLE, A TOPICAL PDE4 INHIBITOR

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Introduction: The topical PDE4 inhibitor, crisaborole, is a non-steroidal agent FDA-approved for the treatment of atopic dermatitis. However, use in clinical practice is often limited by application site pain.

Objective: To determine the incidence rate of burning with topical crisaborole 2% ointment, and the factors that predispose patients to a higher rate of application site burning

Materials and Methods: An institutional review board approved retrospective chart review of patients prescribed crisaborole at Tufts Medical Center was performed. The incidence of application site pain, defined as “burning” or “stinging,” was assessed, as well as if certain factors predispose patients to pain. Patients were advised to apply a thin layer of crisaborole over affected area(s) twice daily, and were regularly assessed at follow-up for side effects.

Results: A total of 41 patients (mean [SD] age, 35.9 [21.5] years) with AD were eligible for the study. 13 patients (31.7%) reported application site pain, which typically occurred within a few minutes after application.
Of the 10 patients who applied crisaborole exclusively to the face, 5 (50%) developed pain, whereas of the 25 patients that applied crisaborole to non-facial sites, 5 (20%) had pain (p-value = 0.048). 6 patients applied crisaborole to both the face and non-facial sites, of which 3 (50%) developed pain: 2 had pain only on the face, while the other had pain at all sites.

Conclusions: Crisaborole shows promise as a non-steroidal alternative in the topical management and treatment of AD. However, in clinical practice, application site pain can limit its use, with more patients reporting pain in our study than in the phase III clinical trials (31.7% % vs. 4.4%). Furthermore, facial application was associated with significantly higher rates of application site pain (p = 0.048).