INTRODUCTION

- Lichen nitidus is a rare chronic inflammatory condition that presents as shiny, flat-topped papules. The etiology of lichen nitidus is unknown; however, it is speculated that it can be a genetic disease as case reports in literature have been familial. Lesions can occur in the neck, trunk, limbs, abdomen, and the penile shaft. The pathophysiology of lichen nitidus is believed to stem from an underlying immune mechanism. It is suspected that an allergen may cause antigen-presenting cells to activate a cell-mediated response that ultimately creates the distinct inflammatory papules. Lichen nitidus can be difficult to treat and can lead to hypopigmentation in African American patients after long-term topical steroid use. Roflumilast cream 0.3% is a potent topical phosphodiesterase 4 (PDE4) inhibitor approved in 2022 by the FDA for the treatment of psoriasis, including intertriginous disease. Roflumilast is more potent than apremilast and crisaborole, with roflumilast more closely mimicking the three key binding sites of cAMP.

CASE PRESENTATION

- A 51-year-old African American man presented to clinic with a history of hard, pruritic, white-colored papules on both hands. Disease was refractory and uncontrolled for 2 years despite being treated with emollients, triamcinolone cream 0.1%, and clobetasol ointment 0.05%. A biopsy showed lymphocytic infiltrate in the upper dermis and the classic “claw and ball” consistent with lichen nitidus. Due to persisting pruritus and an inadequate response to topical corticosteroids and emollients, the patient was started on roflumilast cream 0.3% QD. After 4 weeks of treatment, the patient reported resolution of pruritus and resolution of lesions.

CONCLUSIONS

- We report the case of a 51-year-old patient with lichen nitidus that was successfully treated with roflumilast cream 0.3% QD monotherapy after prior treatment failure. This report suggests reduction of inflammation with a potent topical PDE4 inhibitor roflumilast cream 0.3% is a potential treatment option. Further clinical evaluation is suggested to evaluate roflumilast cream as a potential treatment option for lichen nitidus.

REFERENCES