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Pustular and Erythrodermic Psoriasis in Patients Treated With Oral Glucocorticoids: A Survey of United States Dermatologists

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ABSTRACT

Dermatology dogma has cautioned against the use of orally administered glucocorticoids (OAG) in the treatment of psoriasis, largely due to concerns of life-threatening generalized pustular psoriasis (GPP) and erythrodermic psoriasis (EP). However, studies show that OAG are frequently used for psoriasis, often by dermatologists. Given the widespread use of OAG, we see an urgency in examining the relationship between OAG usage and the development of GPP and EP. This anonymous electronic survey of 50 US dermatologists examines OAG use in the management of psoriasis and the frequency at which dermatologists report seeing associated adverse outcomes of GPP and EP. Overall, 9 out of 50 (18%) respondents occasionally prescribe OAG to patients with psoriasis. Dermatologists who prescribe OAG tended to be younger than those who did not, with two-thirds in clinical practice for 0-10 years. Among all respondents, 16% (8/50) had experienced one or more patients developing GPP/EP in the context of OAG treatment for psoriasis. Our study suggests that OAG for the management of psoriasis is not uncommon among U.S. dermatologists, despite nearly universal awareness of its risks. Our observed low prevalence of GPP and EP emphasizes the need for prospective studies to better characterize OAG's risk/benefit profile in psoriasis.

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INTRODUCTION

Dermatology dogma has cautioned against the use of orally administered glucocorticoids (OAG) in the treatment of psoriasis. This is due largely to concerns of generalized pustular psoriasis (GPP) and erythrodermic psoriasis (EP), as well as long-term glucocorticoid side effects.[1,2] However, OAG are frequently used for psoriasis, often by dermatologists.[3,4] Treatment outcomes data are sparse, but rates of severe psoriasis flares may be low in psoriasis patients who receive systemic corticosteroids.[5,6] Given the widespread use of OAG, we see an urgency in examining the relationship between OAG usage and the development of GPP and EP. This survey of US dermatologists examines OAG use in the management of psoriasis and the frequency at which dermatologists report seeing associated GPP and EP.

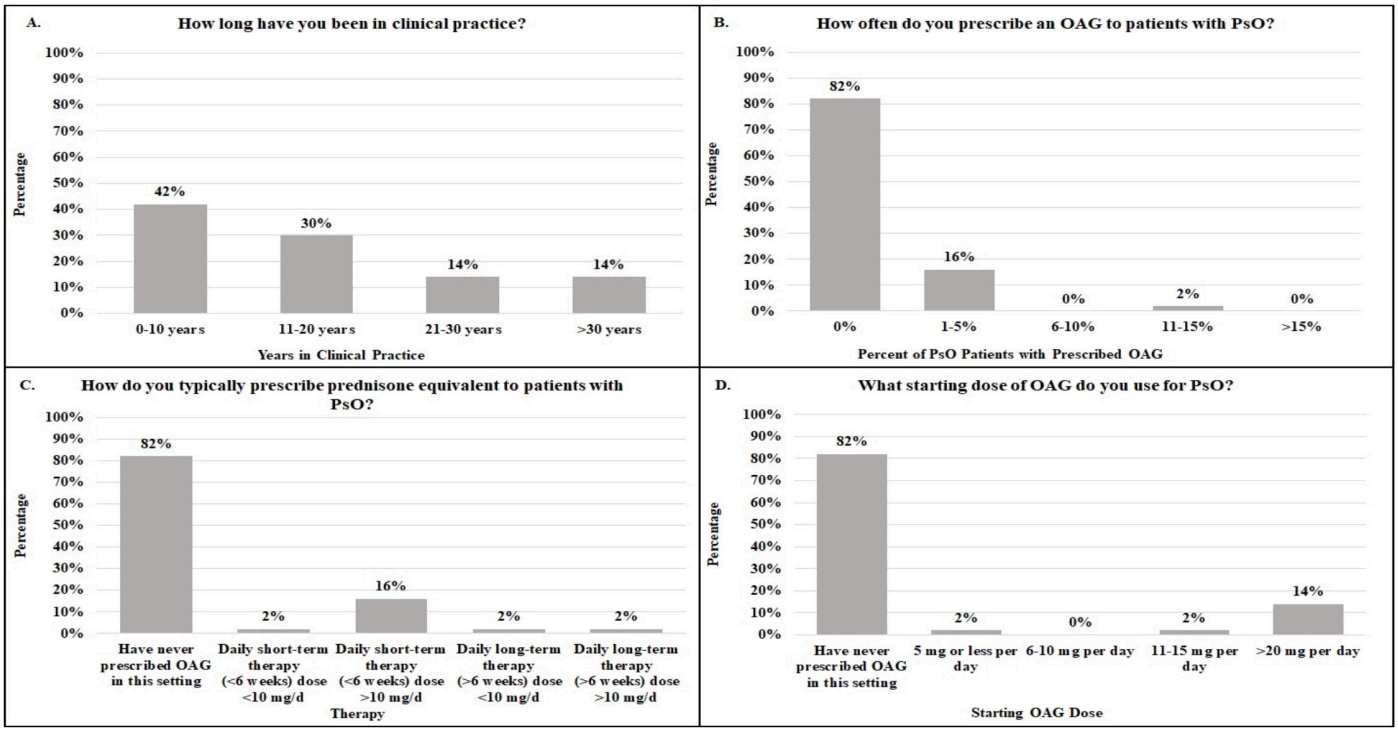
MATERIALS AND METHODS

Fifty U.S. community and university-based dermatologists completed an online survey consisting of 14 questions. This study was approved by the Main Line Health Institutional Review Board. Investigators were blinded to the respondent's identifying information. Respondents provided informed consent without financial compensation. Dermatologists selected responses based on their OAG prescribing habits in the management of psoriasis and their contextual experience with GPP and EP. Information on parenterally administered glucocorticoid (PAG) use, management objectives, duration of treatment, and disease outcomes were also collected.

RESULTS

Most of the dermatologists surveyed have been in clinical practice for greater than 10 years and see between 6–10 patients with psoriasis per week (Figure 1–A). Overall, 9 out of 50 (18%) respondents reported occasionally prescribing OAG to patients with psoriasis, typically 1¬–5% of the time (Figure 1–B). Dermatologists who prescribe OAG tended to be younger than those who did not, with two-thirds in clinical practice for

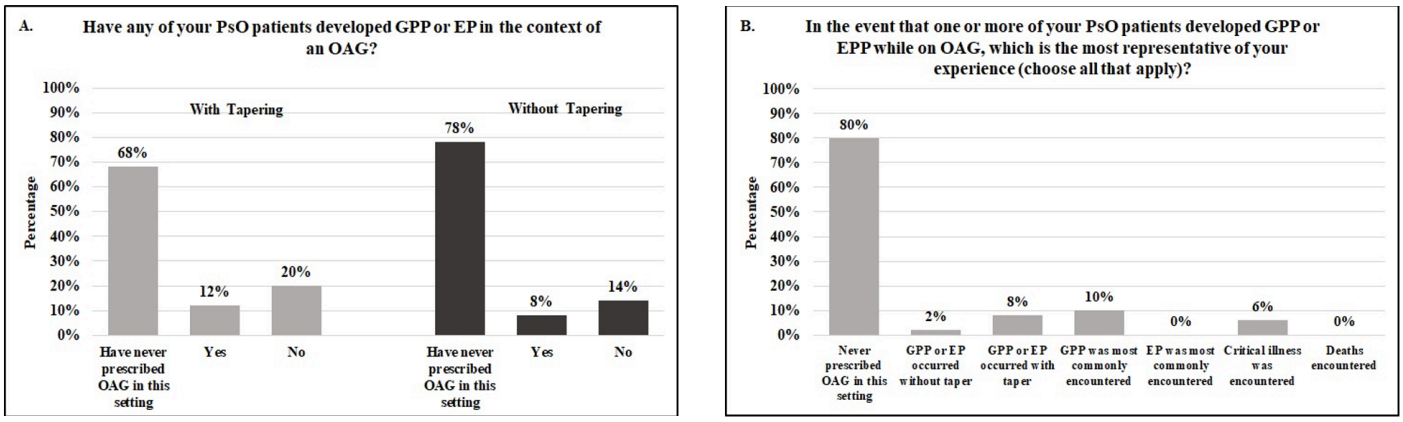
FIGURE 1. (A) Years in clinical practice, (B) prescription frequency, (C) preferred therapy, and (D) starting dose of orally administered glucocorticoids for psoriasis. OAG indicates orally administered glucocorticoids and PsO indicates plaque psoriasis.



0–10 years. The most common indication for the use of OAG was as bridge therapy to DMARD/biologics, with prednisone as the OAG of choice. The most popular regimen was daily short-term therapy (<6 weeks), dose >10 mg/day with an intermediate taper of 3–6 weeks (Figure 1–C, D). PAG usage was reported by 32% (16/50) of respondents, typically in 1–10% of patients.

Among respondents, 16% (8/50) had experienced one or more patients developing GPP/EP in the presence of OAG treatment. GPP/EP was reported more frequently in the context of tapering than without tapering (12% vs 8%, Figure 2–A). Nearly all respondents (98%) were aware of the risk in patients with psoriasis of developing GPP and EP in the context of OAG wean. GPP was most commonly seen, while EP was not noted. Critical illness was infrequently encountered (6%, Figure 2–B), and no deaths were reported (Figure 2–B).

FIGURE 2. (A) Occurrence and (B) description of generalized pustular or erythrodermic psoriasis in the context of orally administered glucocorticoids for psoriasis. EPP indicates erythrodermic psoriasis; GP, generalized pustular psoriasis; OAG, orally administered glucocorticoids; and PsO, plaque psoriasis.



DISCUSSION

Our study suggests that OAG for the management of psoriasis is not uncommon among US dermatologists, despite nearly universal awareness of its risks. Usage was higher in younger physicians, parenteral administration was frequent, and bridge therapy to DMARDs/biologics was the favored indication. While a substantial percentage of respondents (16%) have seen at least 1 case of OAG-related GPP/EP, historically, flare rates are extremely low.[5,6] When dermatologists do see OAG-related GPP/EP, we cannot assume with certainty that systemic glucocorticoid therapy was causally related, as OAG may be instituted when managing a patient with aggressive psoriasis that is headed toward a pustular flare. Moreover, in view of the high prevalence of OAG use for psoriasis, it is intriguing that only 16% of dermatologists report having observed one or more cases of OAG-associated GPP and that the majority of these were reported by dermatologists who did not prescribe OAG for psoriasis. The small sample size and questionnaire platform are limitations. Prospective studies would help better characterize OAG's risk/benefit profile in psoriasis.

DISCLOSURES

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