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Efficacy of topical PGE2 in recalcitrant oral lesions of pemphigus vulgaris: a clinical trial

Editor

Pemphigus vulgaris (PV) is an autoimmune blistering disease of mucosae and skin that tends to cause long-standing recalcitrant oral erosions in a few patients.[1–3] There have been surprisingly very few studies describing the treatment outcome in PV patients with recalcitrant oral mucosal erosions. Dermatologists often encounter great difficulties in treating these patients.

Corticosteroids (oral/topical), either alone or in combination with immunosuppressives,[1] are commonly used therapies that are often required for longer duration, thus leading to undue side-effects.

Prostaglandins (PG) have been reported to exert immunoregulatory on macrophage 1a antigen activation,[4] T-cell proliferation rate,[5] suppressor T cells[6] and B-cell proliferation[7] and to prevent mucosal damage and promote peptic ulcer healing.[8,9]

Morita *et al*. used oral prostaglandin E2 (PGE2) to treat refractory oral erosions of PV and obtained impressive results.[10,11] Based on this, we used topical PGE2 to treat our patients with PV with recalcitrant oral lesions.

After discontinuing earlier therapies for 2 weeks, 10 patients with recalcitrant oral lesions of PV (histopathologically and immunofluorescence proved) were advised to apply topical PGE2 twice daily over the affected sites. Patients were assessed at monthly intervals and a photograph pre- and post-treatment of one affected site was taken. After completion, the patients were followed up for another 2 months to note the progress of improvement. Recalcitrance was defined as, persistence of oral lesions up to 4 months or longer after the skin lesions had healed. All these patients had been treated earlier with oral steroids either alone or in combination with oral cyclophosphamide/topical steroids/azathioprine for recalcitrant oral lesions.

Severity of oral mucosal involvement was assessed as minimal disease: only buccal mucosal/labial/lingual/palatal/pharyngeal involvement; moderate disease: buccal mucosa with labiogingival/palatal/lingual/pharyngeal mucosal involvement; and severe disease: three or more mucosal sites involved.

Table 1 Disease and demographic parameters of the patients

Sex	Age (years)	Duration of disease (average)	Minimal mucosal severity	Moderate mucosal severity	Severe mucosal severity
Male	35.50	7.17 months	2	2	0
Female	25.40	6.25 month	2	3	1

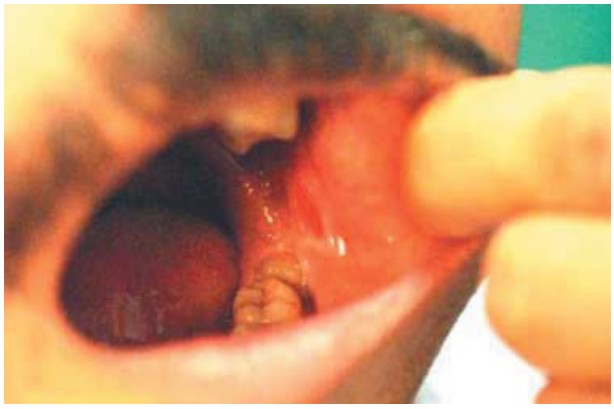

fig. 1 Pretreatment

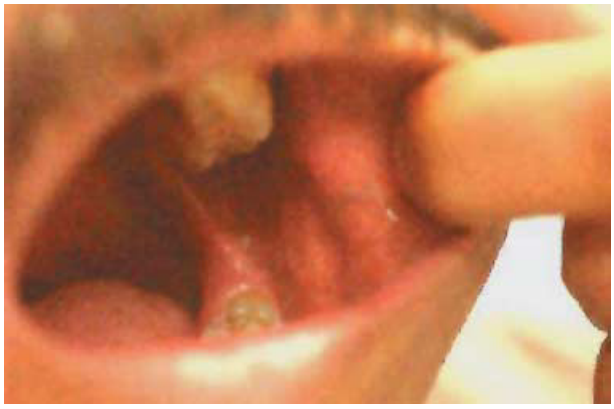

fig. 2 Post-treatment

Disease and demographic parameters are given in Table 1.

Three patients, each with minimal and moderate oral disease, reported an initial improvement in pain and healing of the oral erosions by 5 weeks followed by complete healing of the lesions by 3 months. Patients with moderate disease severity relapsed with oral erosions within 7–10 days of discontinuing PGE2, and their condition improved upon restarting and continuing PGE2. None had a relapse in minimal group (figs 1 and 2).

Four (40%) patients that included one patient, each with minimal and severe oral disease and two patients with moderate severity, failed to improve, instead all

had an exacerbation, which required reinstitution of oral steroids.

Side-effects in form of nausea and diarrhoea were seen in two patients; however, these did not necessitate the discontinuation topical PGE2.

Our data show that topical PGE2 has an excellent efficacy in patients with minimal and moderate recalcitrant oral mucosal disease. Although the patients with moderate oral disease severity had a relapse upon discontinuing topical PGE2; restarting topical PGE2 healed the erosions. PGE2 may induce abortions, hence to be avoided in pregnant women. Topical PGE2 was well tolerated by the patients.

Our experience with topical PGE2 suggests that it may be useful in treating the recalcitrant oral erosions of PV, thus using it as a steroid-sparing agent. Long-term studies are required to assess this role of topical PGE2.

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Genitogluteal porokeratosis

Editor

Porokeratosis is a disorder of epidermal keratinization characterized by annular lesions with central atrophy and peripheral keratotic ridge. Different forms of porokeratosis have been described: porokeratosis of Mibelli, linear porokeratosis, disseminated superficial porokeratosis, disseminated superficial actinic porokeratosis, porokeratosis palmaris et plantaris disseminata and punctuate porokeratosis.[1] Porokeratosis may appear anywhere in the body, most commonly on the extensor aspect of the extremities. The term porokeratosis ptychotropica was coined to indicate the predilection of the lesions for the flexural skin fold.[2] Disseminated porokeratosis involving genitogluteal area can sometimes be found. However, porokeratosis limited to the genitogluteal area is rarely addressed in the dermatological literature.

We report six additional cases of genitogluteal porokeratosis including five men (ages 29, 34, 48, 49 and 66 years) and one woman (43 years old). The duration varied from 1 to 9 years before diagnosis was made. The skin lesions were 1–2 cm in diameter and one to three in number, located in the scrotum or the medial aspect of the buttock. Two of them manifested as erythematous indurated keratotic plaques with uneven surface (fig. 1a), three showed typical features of porokeratosis of Mibelli (fig. 1b), and one displayed a psoriasis-like erythematous whitish-scaly plaque (fig. 1c). Histopathology showed characteristic cornoid lamella and acanthotic epidermis with elongated rete ridges, without dysplastic or atypical cells. Nevertheless, focal hyperchromatic cells, dyskeratoses or mitoses were detected in five of the six patients. Further examination did not reveal cutaneous malignant transformation or underlying genitourinary malignancies. Because of the limited number of lesions, treatment was carried out mainly with surgical excision or CO_2 laser vaporization. No recurrence was observed in a subsequent follow-up for up to 9 years.

Porokeratosis limited to the genitogluteal area has rarely been emphasized, with only 10 cases described in the literature. In analysis of the total 16 patients reported,