

# **Efficacy of steroid oral mini-pulse therapy in lichen planus: An open trial in 35 patients**

Sir,

Lichen planus (LP) is an inflammatory papulosquamous disorder presenting with violaceous, polygonal, flat-topped, pruritic papules and plaques on the flexor surface of the glabrous skin, mucous membrane and nail. Though the exact cause of LP is unknown, the current concept of pathogenesis includes genetic and immunologic factors. Systemic glucocorticoids are the mainstay of dermatologic therapy because of their potent immunosuppressive and anti-inflammatory properties, but their long-term use may lead to various side effects.

To avoid or minimize the side effects of daily steroids, we evaluated the efficacy of oral mini-pulse (OMP) therapy with betamethasone in LP in an open

uncontrolled study design. Thirty-five patients with classical LP and not on any active medication were enrolled in the study. Patients with a history of gastritis, tuberculosis, uncontrolled diabetes mellitus and hypertension and pregnant and lactating women were excluded. Baseline investigations and skin biopsy for histopathology and direct immunofluorescence were performed in all patients. The blood pressure and weight were recorded initially and monitored every month.

All patients received 6 mg of betamethasone phosphate orally once a week for 3-6 months. If no improvement was seen after 6 months, it was considered as treatment failure. Follow-up assessment was done monthly to assess the severity of pruritus, appearance of new lesions, percentage of improvement and side effects of steroid treatment. The severity of pruritus was graded on a scale of 0 (none), 1 (mild), 2 (moderate) and 3 (severe). The percentage of improvement was calculated as follows:

- 100% - Complete subsidence of all lesions, absence of pruritus and no new lesions
- 76-100% - A few elevated lesions, itching is absent or mild, but there are no new lesions
- 51-75% - Most lesions remain elevated, mild to moderate, but no new lesions
- <50% - Most lesions remain elevated, itching is moderate to severe and new lesions

Patients were examined for side effects such as weight gain, hypertension, gastritis, acneiform eruption, striae and cushingoid features.

Of the 35 patients, 19 (54.28%) patients were males and 16 (45.71%) were females with ages between 18 to 65 years. The duration of LP was less than 6 months in 28 patients (80%) and more than 6 months in 7 patients (20%). Severe pruritus was seen in 16 (45.7%) patients.

Twenty (57.14%) patients showed complete cure or 100% improvement, of which 13 (37.14%) improved in 3 months and 7 (20%) in 5 months. Six (17.14%) patients showed 76-100% improvement, two (5.71%)

patients showed 51-75% improvement and three (8.57%) patients showed <50% improvement. The lesions in all cases healed with hyperpigmentation. Four (11.42%) patients dropped out of the study, including two due to side effects. After discontinuing treatment the disease relapsed in five (14.28%) patients after an average duration of 3 months. Side effects due to treatment were seen in 20 (57.1%) patients; most commonly weight gain, insomnia and epigastric pain.

Corticosteroids have been used as a therapeutic modality for LP topically, intralesionally or systemically.<sup>[1,2]</sup> Even though daily oral steroid therapy is highly effective, long-term use may result in serious side effects. To avoid these side effects, pulse therapy was conceived. Dexamethasone-cyclophosphamide pulse therapy in pemphigus patients has been widely accepted.<sup>[3]</sup> Oral mini-pulse therapy may be used for longer periods with minimal side effects as compared to daily corticosteroid therapy. Even if a relapse occurs, the therapy may be repeated and remission may be achieved in a large proportion of cases. In our study, the response was good to excellent in 88.5% patients. We therefore conclude that betamethasone oral mini-pulse therapy is a convenient and fairly effective treatment modality for extensive lichen planus.

## REFERENCES

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