

## The Use of 5-Fluorouracil vs. Triamcinolone Intralesional Injection for Treatment of Oral Lichen Planus

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### ABSTRACT

Oral lichen planus is a very common chronic mucomembraneous inflammatory disease of the oral cavity. 5-Fluorouracil (5-FU) has immunological properties by inhibiting thymidylate synthase. Several studies have been proved that 5-FU suppress T-cell activation in humans. The study aimed to investigate the immunomodulating effects of intralesional 5-FU as an immunosuppressant agent for treatment of oral lichen planus in comparing with triamcinolone injection. A randomized single-blind clinical study was performed. The study sample that consists of 40 patients were divided into two groups. Group A consists of 20 patients represent the control group and received 0.5 mL of triamcinolone acetone per 1cm<sup>2</sup> once weekly for 3 consecutive months. While group B consists of 20 patients received 0.5 mL of 5-FU per 1cm<sup>2</sup> once weekly for 3 consecutive months (12 weeks). All patients were clinically evaluated every 1 month to assess the clinical response which were denoted by flattening of lesions, absence of new lesions and decrease in severity of irritation and burning sensation. The mean age of patients was 42±10.57; and male to female ratio was 2:3. The duration of OLP in the enrolled patients was varied from 4 months to 2 years. A statistically significant difference was observed comparing percent of oral lesion areas improvement between 5-FU group and Triamcinolone group. It was concluded that intralesional administration of 0.5 mL of 5-FU per 1cm<sup>2</sup> in comparing to triamcinolone acetone has been showed a superior significant buccal-healing effect of oral lichen planus by ameliorating the cytotoxic T cells (CD8+) damage by "thymidine-less death" mechanism.

**Keywords:** Oral lichen planus, 5-Fluorouracil, Triamcinolone, mucomembraneous.

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