

## **Polarized Light as an Adjuvant to Drug Therapy for the Treatment of Refractory Oral Erosive Lichen Planus: A Case Report**

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### **ABSTRACT**

Oral lichen planus is a chronic inflammatory disease of unknown etiology, associated with a malignant transformation in 1.2% of cases. It can be predominantly white and therefore almost always asymptomatic, or with the presence of large erosions in different areas of the oral cavity. In this case the pathology can be disabling, causing severe chewing difficulties and compromising the patient's quality of life. The gold standard for the treatment of this pathology is the use of topical cortisones combined with nystatin. The use of photodynamic therapy for the treatment of these lesions is also documented in the scientific literature. Polarized light is a light with a very wide wavelength variability, created for the treatment of erosive and ulcerative skin lesions and then also introduced in other fields, such as in oral medicine. It has an excellent analgesic and bio stimulating effect. We propose a case of erosive lichen planus refractory to systemic cortisone therapy, present for 4 years without remission, successfully treated with 6 15-minute sessions of phototherapy with polarized light, using a Bioptron device at 25 watts of power. After an important improvement, the therapy was concluded with gel based on ozonated olive oil (Ialozon, Gemavip, Cagliari, Italy) and topical cortisone, due to the impossibility of continuing the therapies in the study (lockdown). Polarized light is very easy to use, has no side effects, does not require special eye protection and has proven to be very effective in the clinical resolution of refractory lesions to drug therapy.

**Keywords:** Refractory Oral Erosive Lichen Planus, Photodynamic therapy, Polarized light

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