

Extended Abstract

Photodynamic Therapy in Non-Responsive Oral Angular Cheilitis: 4 Case Reports [†]

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1. Introduction

Detection of labial lesions is one of the more common additional tasks for dental clinicians. These lesions are common, painful and eligible for healing trouble due to occlusion issues and comorbidity factors: salivary flow rate, micotic acute opportunistic sub infections and systemic health impairments. Angular cheilitis is one of the most common labial lesion in commissural space. Painful, symmetrical and often hemorrhagic. Traditional treatment consists in antimicrobial topical preparations such *Clotrimazole*, *Antimicrobial topical ointment* and *Ialuronate derived lubricants*. Advanced non responsive lesions could be treated with fillers and invasive infiltrative medication. Antimicrobial-Photodynamic therapy demonstrated high efficacy with Gram + and Gram – bacterial species. Here we suggest a clinical protocol used in well-wounded labial lesion using photosensitizers and diode light.

2. Materials and Methods

Four patients (3 females and 1 male) were treated with same protocols in private practice office. After lesion check and diagnosis of angular cheilitis labial lesions were treated with topical Toluidine Blue High Viscosity (CMS Dental, Copenhagen, Denmark) 1 mg/mL solution gently applied on the exposed dermal surface (Figure 1). After sensitizer exposition, a 4 watt, 630 nm wave length, light emission were performed for a ten cycles of 30 s (Fotosan 630[®] CMS dental—Copenhagen, Denmark). After the photosensitizer was removed.



Figure 1. Patient before using Fotosan 630.

3. Results

7 days follow up were performed (Figure 2). Three patients showed complete and integral *Resitutio ad integrum*. Only one patient with severe occlusion issue shown a partial healed wound and non-integral epithelial growth after 30 days.



Figure 2. Patient 7 days after using Fotosan 630.

4. Discussion and Conclusions

Physical activity and chemical properties of a PDT and sensitizer adjuvancts may be used in treatment of severe non responsive labial lesions due to their antimicrobial and bacteriostatic properties.

Conflicts of Interest: The authors declare no conflict of interest.

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