

Periodontal morphological microcirculation in Oral Lichen Planus

Giuseppe Alessandro Scardina¹, Antonino Cacioppo¹, Francesco Carini²,
Alessia Ruggieri¹, Vincenzo Valenza², Pietro Messina¹

¹ Department of Oral Science-University of Palermo-Italy

² Department of Experimental Medicine-Section of Human Anatomy-University of Palermo-Italy

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SUMMARY

This study aimed at evaluating possible differences in the vascular pattern (of periodontal mucosa microcirculation) between healthy patients and patients suffering from PLP (periodontal lichen planus).

Fifty-four patients (27 patients suffering from PLP and 27 healthy patients) were examined by means of videocapillaroscopy. The following area was examined for each patient: periodontal mucosa corresponding to 1.1 and 2.1. The following parameters were analyzed on every capillaroscopic image: capillary loop length, loop diameter, capillary tortuosity, capillary density, avascular areas, possible microhaemorrhages, distinctive morphology.

The results obtained using videocapillaroscopic software were subjected to statistical analysis. The following parameters showed statistically significant differences: density, loop length, total diameter.

This study and the research carried out over two years (from 2004 to 2006) have allowed us to confirm the increase in capillary diameter and density in PLP patients compared to the control patients. Besides, a remarkable increase in capillary density has been shown, which indicates a strong angiogenetic activity in PLP patients.

INTRODUCTION

Lichen planus is a chronic inflammatory pathology (Thornhill, 2001) with autoimmune pathogenesis (Monaco et al., 2004), which frequently involves the oral mucosa, either with the skin surface, or independently and precociously. It affects about 0.5-2% of the global population (with an incidence varying according to the geographical location), mainly women; it begins at an average age between forty and fifty. Oral Lichen Planus (OLP) (Setterfield et al., 2000) develops on the buccal mucosa in 60-70% of the cases. Most of the skin lesions are self-limiting, while oral