



Immunohistochemistry of lymphocytes in benign lymphadenosis of oral mucosa

S.-X. Li^{1*}, Q. Li^{2*}, Y.-Q. Yang³, L.-J. Jin⁴, Z. Sun¹ and S.-F. Yu⁵

¹Department of Periodontics & Oral Medicine, School of Stomatology, Capital Medical University, Beijing, China

²Department of Prosthodontics, School of Stomatology, Capital Medical University, Beijing, China

³Department of Orthodontics, School of Stomatology, Hong Kong University, Hong Kong

⁴Department of Periodontics, School of Stomatology, Hong Kong University, Hong Kong

⁵Department of Oral Pathology, School of Stomatology, Peking University, Beijing, China

*These authors contributed equally to this study.

Corresponding authors: S.-X. Li / Z. Sun

E-mail: shuxialicn@163.com / shipingnang@yeah.net

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ABSTRACT. Benign lymphadenosis of oral mucosa (BLOM) is a common oral mucosa disease and may be regarded as a precancerous lesion. However, the association between its biological behavior and lymphocyte distribution remains unclear. Therefore, to investigate the characteristics of BLOM, we studied the infiltration of lymphocytes associated with it. The expression levels of CD74, CD20, CD3, and CD45RO were evaluated by immunohistochemical staining in 14 samples from BLOM, 9 samples from BLOM with atypia hyperplasia, 11 samples from BLOM with canceration, and 10 samples from normal oral mucosa tissues. The results were analyzed by two-sample *t*-test using SPSS 10.0 for Windows, and $P < 0.05$ was considered to be sig-

nificant. In normal oral mucosa, positive expression levels of CD3 and CD45RO were presented in the extra-lymphoid follicle, and the expression levels of CD74 and CD20 were negative. In all BLOM groups, the expression level of CD20 was positive except for one case of BLOM with canceration; the expression levels of CD74 were all positive. Positive expression levels of CD3 and CD45RO could be found not only in extra-lymphoid follicles but also in inner-lymphoid follicles in the BLOM groups. The expression levels of CD74 and CD20 in extra-lymphoid follicles, and CD3 and CD45RO in inner-lymphoid follicles in BLOM were significantly higher than in BLOM with canceration. The infiltrated lymphocytes in BLOM comprise T- and B-cells. This indicates that the lymphoid tissue in BLOM is mucosa-associated lymphoid tissue and BLOM is a proliferative lesion.

Key words: CD20; CD74; CD3; CD45RO; Immunohistochemistry; Benign lymphoadenosis of oral mucosa (BLOM)