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口腔黏膜下纖維化及口腔白斑症患者的周邊血液單核細胞TNF-α、TGF-β及IFN-γ mRNA表現量研究

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口腔癌已成為國人嚴重的健康課題，口腔黏膜下纖維化及口腔白斑症被認為是口腔癌的癌前期病變，因此研究這些口腔黏膜疾病的致病因對於口腔癌的預防和治療有其重要性。口腔癌前期黏膜病變與免疫系統有關係，而細胞激素（cytokine）在調控人體免疫反應上扮演很重要的角色，所以人體周邊血液單核細胞產生細胞激素能力之測定日益受到重視，並已成為評估病人細胞性免疫能力的重要基準。本研究各先培養12例口腔黏膜下纖維化患者、口腔白斑症患者的周邊血液單核細胞，加以PHA刺激培養72小時後收集單核細胞，再將單核細胞打破後萃取細胞核內之mRNA，然後以RT-PCR之方法來偵測口腔黏膜下纖維化、口腔白斑症患者的周邊血液單核細胞內控制分泌TNF-α、TGF-β及IFN-γ這些細胞激素的單核細胞之細胞核內的mRNA表現量與正常口腔黏膜之差異性。結果發現口腔黏膜下纖維化之TNF-α mRNA（0.46+0.13 > 0.36+0.13）及IFN-γ mRNA(0.53+0.19> 0.47+0.19)表現量均較正常口腔黏膜者微高，而TGF-β則可能因口腔黏膜下纖維化疾病分期不同而有不同表現（0.57+0.08> 0.54+0.08），但均未達統計學上之差異。而口腔白斑症患者之TNF-α mRNA(0.51+0.13 > 0.36+0.13)及IFN-γ mRNA(0.49+0.19> 0.47+0.19)表現量亦較正常口腔黏膜者微高，但是TGF-β mRNA表現量卻比正常口腔黏膜者低（0.43+0.08<0.54+0.08），但均未達統計學上之差異。

關 鍵 字：口腔黏膜下纖維化、口腔白斑、腫瘤壞死因子、轉型因子、干擾素

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mRNA Expression of TNF-α, TGF-β and IFN-γ Cytokines in Cultured Peripheral Blood Mononuclear Cells in Patients with Oral Submucous Fibrosis and Leukoplakia

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Oral cancer has become a serious health issue in Taiwan, and it is believed that oral submucous fibrosis (OSF) and leukoplakia are precancerous lesions. Therefore to focus on the etiology of these oral mucosal lesions is very important for the prevention and treatment of cancer. Oral precancerous mucosal lesions have a close link to the immune systems, and cytokines have played an important role on how to regulate the immune systems. It is important that human peripheral blood mononuclear cells could produce cytokines, and it has become a guideline of how to evaluate the cellular immunity of these patients. In our study, we cultured the peripheral mononuclear cells of the patients with OSF(12 persons) and leukoplakia(12 persons) by PHA irritation for 72 hours, and then detected the mRNA expression of TNF-α、TGF-β and IFN-γ of the mononuclear cells by RT-PCR method. Our result showed that the TNF-α mRNA (0.46+0.13 > 0.36+0.13) and IFN-γ mRNA (0.53+0.19 > 0.47+0.19) expression was higher in OSF patients than the control group and TGF-β may have different expressions (0.57+0.08 > 0.54+0.08) because of different stages of OSF. TNF-α mRNA (0.51+0.13 > 0.36+0.13) and IFN-γ mRNA (0.49+0.19 > 0.47+0.19) expression was higher in leukoplakia patients but TGF-β mRNA expression (0.43+0.08 < 0.54+0.08)was lower in patients with leukoplakia than the control group.

Keywords：oral submucous fibrosis, leukoplakia, tumor necrosis factor, transforming factor, interferon

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