## PIXE analysis of microelement included in oral lichen planus affection mucosa

S. Iijima, S. Ishibashi<sup>1</sup>, Y. Sugiyama and K. Sera<sup>2</sup>

Division of Oral and Maxillofacial Surgery, Department of Reconstructive Oral and Maxillofacial Surgery,

Iwate Medical University

1-3-27 Chuodori, Morioka, Iwate 020-8505, Japan

<sup>1</sup>Oral Surgery, Hachinohe Red Cross Hospital 2, Akedo, Tamonoki, Hachinohe, Aomori 039-1104, Japan

<sup>2</sup>Cyclotron Research Center, Iwate Medical University 348-58 Tomegamori, Takizawa, Iwate 020-0173, Japan

## Abstract

Acause of oral lichen planus does not become clear. It is assumed that an allergy to metal is convincing while various opinions are present. However, there were not the oral lichen planus affection mucosa and the study of metal relations. Therefore we used PIXE method, and a component element of oral lichen planus affection mucosa was examined directly. We study it to specify cause metal. We examined component metal of oral lichen planus affection mucosa of 59 samples this time. The data were compared with healthy oral mucosa. Contaminated element originally exists in a human body. Therefore we examined contaminated element this time. There was much Y in the OLP group with the rate of detection and content. Y is a transition element. It will be an element to pay attention to in future. Then we analyzed serum and saliva. The aluminum contained a lot it to saliva than serum. It was different from other elements. It will be the problem that we examine in future.