

## **Therapy monitoring with FDG-PET after radiochemotherapy of oral cancer**

M. Izumisawa, T. Takahashi, H. Sato, S. Shoji, M. Hoshino, D. Kondo, M. Shozushima

Department of Dental Radiology, School of Dentistry, Iwate Medical University  
19-1 Uchimaru, Morioka 020-8505

### **Abstract**

Combined protocols of radiation therapy and surgical resection, as applied in advanced oral cancer, rely on objective and early assessment of treatment response to radiation therapy. Clinically, FDG PET has been shown to be useful in the evaluation of the therapeutic response. We evaluated the optimal cut-off point to judge tumor cell free from FDG uptake. Twenty patients with squamous cell carcinoma of the oral region were included in this study. They complete the treatment regimen and underwent FDG PET before and 4 week after radiochemotherapy. Six patients were showed residual viable tumor cell after the treatment, whereas 14 patients were successfully treated. The optimal cut-off point with tumor cell free was 3.5, giving a sensitivity of 100 % and a specificity of 57.1 %.