

Detection of Residual Disease of Esophageal Squamous Cell Carcinoma by Dual Time Point ¹⁸F-FDG PET

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Abstract

To differentiate residual disease of cancer from inflammatory process due to radiotherapy, we performed the dual time point FDG PET using 10 thoracic esophageal squamous cell carcinoma with significant regress by radiotherapy. FDG accumulation in esophageal tumor was counted 45 and 90 minutes after isotope injection, and standardized uptake value (SUVs) was calculated. Those 6 of 7 tumor with increase of SUVs in the interval showed regrowth of tumor within 6 months after the end of radiotherapy. The other one of them, that was associated with extended erosive esophagitis, and all 3 tumor with decrease of SUVs remained free from recurrence during the study periods. In active esophagitis, FDG uptake may increase during the interval owing to infiltration of recruiting inflammatory cells.