

## FDG-PET for the evaluation of tumor viability after anticancer therapy

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To evaluate positron emission tomography with  $^{18}\text{F}$ -fluorodeoxyglucose (FDG-PET) as a diagnostic tool to determine tumor viability after anticancer therapy, fourteen patients were examined by FDG-PET after the end of the treatment. The lesions with residual viable tumor cells showed higher uptake of FDG than surrounding normal soft tissue. The lesions, in which tumor viability was lost or very low, showed higher uptake of FDG in four cases and similar uptake to normal soft tissue in three cases. The residual increased uptake of FDG was considered to be caused by remaining tumor cells and/or inflammatory reaction to anticancer treatment. FDG-PET after anticancer treatment should be interpreted by considering the reaction due to the treatment and the partial volume artifact of PET caused by the limited spatial resolution.

**Key words:**  $^{18}\text{F}$ -fluorodeoxy glucose, positron emission tomography, anticancer therapy, oncology