(*7,8*). In a preclinical study of focal cortical ischemia induction in rats, increased uptake of ^{18}F-FET was observed in the ischemic lesions for up to 7 days and the lesion-to-brain (L/B) ratio cutoff of 2 was exceeded in 48% of animals (*9*).

We believe that the high incidence of postoperative ischemic and other nonspecific changes that result in increased ^{18}F-FET uptake even in the absence of viable tumor may diminish the specificity of ^{18}F-FET PET early in the postoperative period. Filss et al. could test this hypothesis by correlating the location of postoperative ischemia on diffusion-weighted images with increased ^{18}F-FET uptake. If concordance is seen, early postoperative MRI might provide important information with regard to the spatial location of ischemia compared with increased ^{18}F-FET uptake and may warrant a delay in postoperative PET until nonspecific postoperative causes of uptake have resolved.

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S. Ali Nabavizadeh*
Ilya M. Nasrallah
Daniel A. Pryma
**Perelman School of Medicine of the University of Pennsylvania*
3400 Spruce St.
Philadelphia, PA 19104
E-mail: seyedali.nabavizadeh@pennmedicine.upenn.edu

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Flare Phenomenon in *O*-(2-[^{18}F]-Fluoroethyl)-L-Tyrosine PET After Resection of Gliomas

REPLY: We thank Dr. Nabavizadeh and colleagues for bringing up postoperative ischemia as a possible cause for the flare phenomenon in *O*-(2-[^{18}F]-fluoroethyl)-L-tyrosine PET after resection of gliomas (*1*). Indeed, it cannot be excluded that postoperative ischemia has contributed to the observed flare phenomenon. On the other hand, we would like to emphasize that increased amino acid uptake in subacute ischemia is generally mild and in the range of a tumor-to-brain ratio of 2 or less. In contrast, some patients with flare phenomenon in our study (*2*) had maximum tumor-to-brain ratios of *O*-(2-[^{18}F]-fluoroethyl)-L-tyrosine (^{18}F-FET) uptake of up to 5 or above, which has not been reported in acute and subacute ischemia. According to the authors' suggestion to exclude ischemia in areas with flare phenomenon, we identified 1 patient in our database with a flare phenomenon in postoperative ^{18}F-FET PET who simultaneously underwent MR diffusion-weighted imaging (DWI) (patient 36, Fig. 1). However, the typical signs of ischemia, that is, a high signal intensity on DWI associated with low signal intensity on apparent diffusion coefficient maps, could not be identified in the corresponding area showing the flare phenomenon in postoperative ^{18}F-FET PET. Thus, DWI in this patient with a flare phenomenon does not support the "ischemia hypothesis." Nevertheless, this important aspect should be considered and further investigated in future studies.

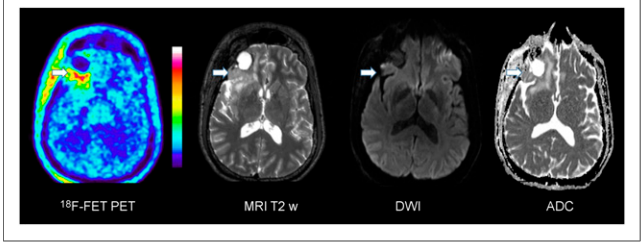

FIGURE 1. Brain scans of patient 20 d after resection of recurrent, right frontal oligodendroglioma World Health Organization II. ^{18}F-FET PET shows increased uptake at posterior border of resection cavity (white arrow) but no signs of ischemia, that is, a high signal intensity on diffusion-weighted imaging associated with low signal intensity on the apparent diffusion coefficient map.

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Christian P. Filss
Carina Stegmayr
Philipp Lohmann
Norbert Galldiks
Karl-Josef Langen*
**Forschungszentrum Jülich*
Wilhelm-Johnen Strasse
Julich, Germany D-52425
E-mail: k.j.langen@fz-juelich.de

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