FDG–PET: for early prediction of response to the first-line chemotherapy in metastatic colorectal cancer?

We read with great interest the article by Bystro¨m et al. [1] about the early prediction of response to the first-line chemotherapy by sequential 2-[fluorine-18]fluoro-2-deoxy-D-glucose–positron emission tomography (FDG–PET) in patients with metastatic colorectal cancer (MCRC). They mentioned the low level of sensitivity and specificity of repeating 18 FDG–PET scans for predicting the treatment response compared with radiological evaluation. We think there are several limitations of this study. First, there were no data about the histopathological subgroups of these MCRC patients. As known, FDG–PET is not a suitable tool for the evaluation and follow-up of mucinous adenocarcinoma because of lower sensitivity compared with nonmucinous adenocarcinoma [2]. The size of the lesion is another limitation of the FDG–PET study [3]. This might be a negative factor in the evaluation of the response with repeating FDG–PET, particularly newly occurring small lesions under treatment. FDG–PET is reported to be mostly useful in staging and surgical treatment plan and detecting recurrences of nonmucinous adenocarcinoma of colon [2, 3]. Thus, it must be used in selected cases and situations. FDG–PET is a cost-effective method for detecting the unresectable MCRC by avoiding the unnecessary surgery [3]. However, cost analysis of initial and repeating FDG–PET studies in MCRC for the prediction of response must be clarified in further studies. Also, radiotherapy may affect the FDG uptake and cause false-positive results up to 6 months after the treatment [3]. However, recent radiotherapy data of the patients were not given in this article. This is another issue that might affect the results of FDG–PET studies. With all these limitations pointed out about FDG–PET, it would be pragmatic to use it for early prediction of response in MCRC in our opinion.

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references


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