



Subcutaneous and muscular metastasis of the colorectal cancer on F-18 FDG PET/CT

To the Editor,

Colorectal cancer is one of the most frequently observed cancer (1). Distant metastases of colorectal cancer occur in the liver and lungs. On the other hand, subcutaneous metastases of colorectal cancer are rarely observed (2). Sufficient data showing muscular and subcutaneous metastasis rates in colorectal cancer detected with Fluorodeoxyglucose Positron Emission Tomography / Computed Tomography (PET/CT) are not available in the literature.

The purpose of this study was to analyse subcutaneous and muscular metastasis rates detected using F-18 FDG PET/CT in patients with colorectal cancer. Retrospective analysis of data of 292 patients with colorectal cancer who had undergone F-18 FDG PET/CT scanning during staging and follow-up phases from July 2009 to October 2012 were included in this study. Patients diagnosed with subcutaneous and muscular metastases were evaluated on the basis of their age, gender, localization of primary tumour, stage of disease at diagnosis, data detected using classical imaging methods during follow-up, time till F-18 FDG PET/CT imaging, localization and size of subcutaneous and muscular metastases detected with F-18 FDG PET/CT, additional metastatic foci, and any surgical procedures that the patient had undergone. After evaluating F-18 FDG PET/CT imaging results of 292 patients with colorectal cancer, subcutaneous and muscular metastasis was detected in eight patients (2.73%). Metastases was detected during the staging phase in one patient and during the follow-up phase in all other patients. The average age of patients diagnosed with metastases was 67.86 years (aged between 35-88 years). Five of these patients were male (62.5%) and three were female (37.5%). Primary tumor of six patients (75%) was localized in the colon and of two patients (25%) was localized in the rectum.

In the retrospective analysis performed by Lookingbill et al. (3), cutaneous metastasis was detected in 4.4% of 413 patients with colorectal cancer whereas, cutaneous and subcutaneous metastases was detected in only three patients of (1%) 2538 patient with colorectal cancer followed in the center of Tan et al. (4). In our study, subcutaneous and muscle metastases rate was found to be 2.05% and 0.68% respectively. Majority of available data on subcutaneous and muscular metastases in colorectal cancer are based on standard imaging techniques. In a study by Pfannenbergl et al. (5), PET/CT imaging was shown to be more sensitive in identifying soft tissue metastases compared with magnetic resonance imaging. Therefore, soft tissue metastasis can be overlooked in patients with colorectal cancer followed with standard imaging methods. To the best of our knowledge cutaneous and muscular metastases rates of colorectal cancer using F-18 FDG PET/CT imaging are not reported in literature. In conclusion, we propose that F-18 FDG PET/CT imaging is an effective method in the detection of subcutaneous and muscular metastases of colorectal cancer.

Peer-review: Externally peer-reviewed.

Author contributions: Concept - S.K., U.K.; Design - S.K., U.K.; Supervision - U.K., C.K.; Resource - U.K., S.K., A.G., U.K.; Materials - S.K., S.K., C.K., A.G.; Data Collection&/or Processing - S.K., U.K., S.K., G.D.; Literature Search - S.K., U.K., S.K., G.D., C.K., A.G.; Writing - U.K., S.K.; Critical Reviews - U.K., S.K., U.K., G.D.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

Conflict of Interest: No conflict of interest was declared by the authors.

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Received: December 24, 2013 **Accepted:** February 10, 2014

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