

Performance of FDG-PET/CT for diagnosis of recurrent uterine cervical cancer.

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The purpose is to evaluate the accuracy of integrated FDG-PET/CT, compared with PET alone, for diagnosis of suspected recurrence of uterine cervical cancer. Fifty-two women who had undergone treatment for histopathologically proven cervical cancer received PET/CT with suspected recurrence. PET-alone and integrated PET/CT images were evaluated by two different experienced radiologists by consensus for each investigation. A final diagnosis was confirmed by histopathology, radiological imaging, and clinical follow-up for over 1 year. Patient-based analysis showed that the sensitivity, specificity, and accuracy of PET/CT were 92.0% (23/25), 92.6% (25/27), and 92.3% (48/52), respectively, while for PET, the corresponding figures were 80.0% (20/25), 77.8% (21/27), and 78.8% (41/52), respectively. PET/CT resolved the false-positive PET results due to hypermetabolic activity of benign/inflammatory lesions and physiological variants, and was able to detect lung metastasis, local recurrence, peritoneal dissemination, para-aortic lymph node metastasis, and pelvic lymph node metastasis missed by PET alone. However, tiny local recurrence and lymph node metastasis could not be detected even by PET/CT. FDG-PET/CT is a useful complementary modality for providing good anatomic and functional localization of sites of recurrence during follow-up of patients with cervical cancer.