# True whole-body field view using PET/CT could allow doctors to more accurately manage cancer patients

November 22 2010

When using combined positron emission tomography (PET) computed tomography (CT) imaging, adopting a true whole-body field of view in the imaging of cancer patients could lead to more accurate staging and restaging than achieved with the routinely used limited whole-body field of view, according to a study in the December issue of the *American Journal of Roentgenology*. PET/CT is a dual imaging technique that is used to diagnose and treat a variety of diseases, including many types of cancers.

"Use of the routine field of view for whole-body FDG PET/CT can lead to underestimation of the true extent of the disease because metastasis outside the typical base of skull to upper thigh field of view can be missed," said Medhat M. Osman, MD, lead author of the study.

The study, performed at Saint Louis University in St. Louis, MO, included 500 patients who underwent true whole-body FDG PET/CT, from the top of the skull to the bottom of the feet. Fifty nine of 500 patients had PET/CT findings suggestive of malignancy outside the limited whole-body field of view. New cancerous involvement was confirmed in 20 of those patients.

"Detection of malignancy outside the limited whole-body field of view resulted in a change in management in 65 percent and in staging in 55 percent of the 20 cases," said Osman.

"Our results show that compared with limited whole-body acquisition, use of true whole-body image acquisition may increase the accuracy of staging, change the treatment of cancer patients, and help in the selection of more accessible biopsy sites, avoiding unnecessary invasive surgical procedures and eliminating unnecessary imaging," he said.

**More information:** www.ajronline.org

Provided by American College of Radiology