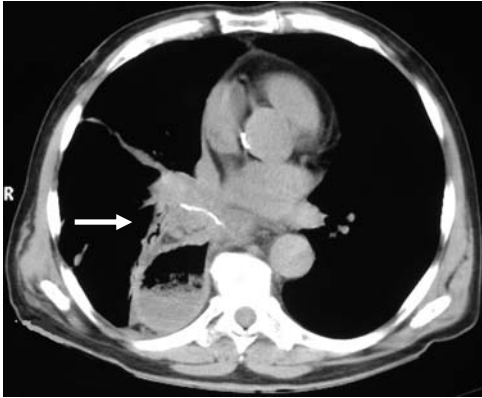
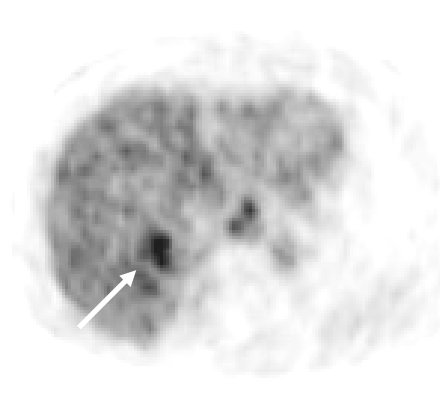


# P.E.T. CASE OF THE MONTH

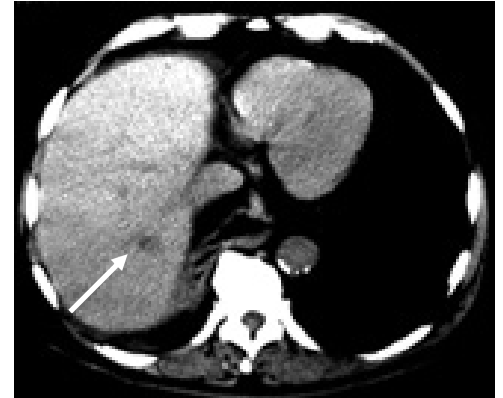
David Seldin, M.D. Franklin Square Hospital Center August 2003



**Fig. 1 Adenopathy adjacent to gastric pull-through**



**Fig. 3 PET scan - liver**



**Fig. 4 CT scan - liver**



**Fig. 2 PET scan Anterior projection**

This 73 year old man had a history of **esophageal carcinoma** treated surgically five years earlier, without evidence of recurrence. He had a chest CT scan because of weight loss and an abnormal chest x-ray. The CT scan showed adenopathy in the mediastinum and adjacent to his gastric pull-through (Fig. 1). A PET scan was ordered for further evaluation.

The PET scan (Fig. 2) showed increased FDG uptake along the mediastinum (arrows), in the upper mid abdomen (white arrow), and in the right femoral head (arrowhead). Sections through the liver showed a hepatic focus as well (Fig. 3). In retrospect a subtle low attenuation hepatic lesion corresponding to the PET abnormality was identified on the CT scan (Fig. 4). Biopsy of a mediastinal lymph node showed adenocarcinoma identical to the patient's original tumor. He is now undergoing chemotherapy.

**How did the PET help?** The PET scan demonstrated distant metastases, including an unrecognized hepatic metastasis, in addition to confirming the mediastinal disease.

Recent studies demonstrated that PET was more accurate than CT and endoscopic ultrasound for diagnosing stage IV disease (82% vs. 64%) (1) and that PET is the most accurate method for detecting distant metastases(2).

(1) Utility of Positron Emission Tomography for the Staging of Patients With Potentially Operable Esophageal Carcinoma. J Clin Oncol 2000;18:3202-3210

(2) Imaging Features of Primary and Recurrent Esophageal Cancer at FDG PET. Radiographics 2000;20:713-723