



Clinical Information:

A 62 year old female is presented with a carcinoid tumor of the rectum. Recent biopsy of the rectal mass demonstrated a carcinoid tumor. Status post tubal ligation and salpingo-oophorectomy. Initial treatment strategy.

Procedure:

The patient's blood glucose was 111 upon reporting to the department. 14.7 mCi of F-18 FDG were administered intravenously, and a 62 minute uptake interval occurred. CT and PET imaging was obtained concurrently from the skull base through the proximal thighs. Axial, sagittal, coronal and three-dimensional reconstructions are reviewed.

Impression:

1. Intense, abnormal FDG uptake is demonstrated at the distal rectum compatible with the biopsied tumor.
2. A large central pelvic mass is identified. The solid components of the mass demonstrate intense FDG uptake. The mass appears to displace adjacent loops of bowel and is directly contiguous with the uterus raising the possibility that the mass represents a second uterine malignancy, or potentially it could represent the primary carcinoid tumor site.
3. Given that carcinoid tumor was found at the biopsy; the heterogeneous / nodular left ventricular uptake is highly suspicious for myocardial metastases.

4. Extensive metastatic disease is demonstrated, involving the skeletal system, the liver, the right pleural / paraspinal soft tissue, multiple lymph nodes, the left adrenal gland, and subcutaneous tissue.
5. Several small, indeterminate pulmonary nodules are also seen.

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