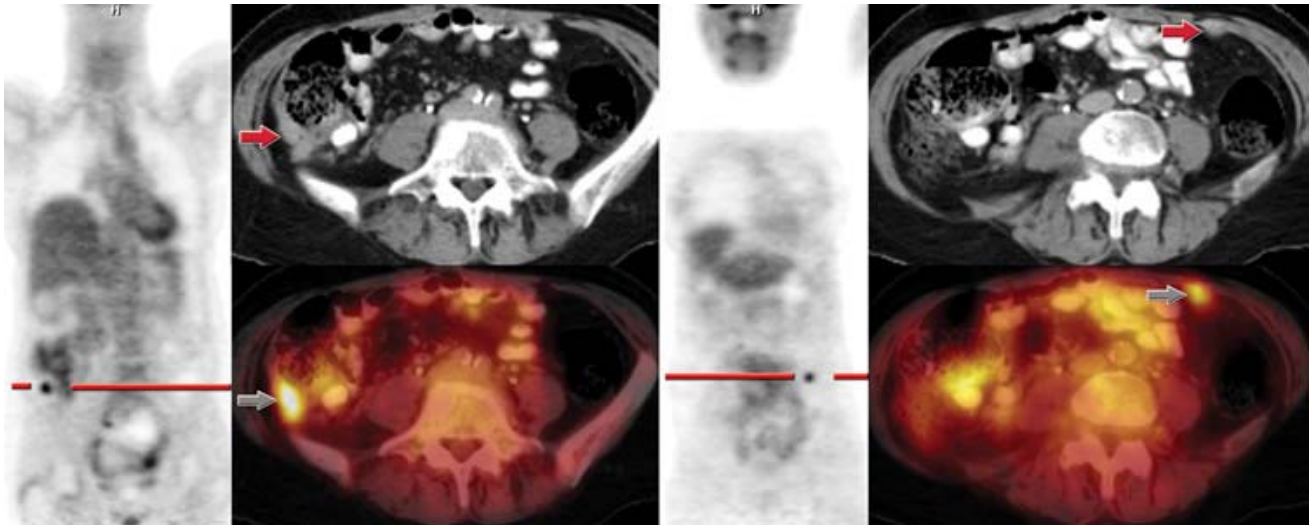


Colorectal Cancer Case Study #5

Clinical History

67 year old female with history of colon cancer who underwent a left hemicolectomy with splenectomy a year ago and a right pericolic soft tissue mass recently biopsied. Evaluate for re-staging.

Imaging Findings*



PETCT FOR COLORECTAL CARCINOMA

RADIOPHARMACEUTICAL ADMINISTERED:
10.86mCi F18-FDG IV.

TECHNIQUE:

Emission scanning was performed extending from the base of the skull through the pelvis approximately one-hour following radiotracer administration. Images were constructed with and without attenuation correction. The blood glucose measurement was 99 mg/dl.

COMPARISON:

CT portion of PETCT exam from 7-9-02 (date of the scan).

FINDINGS:

There are seven focal areas of abnormal intense increased uptake identified in the abdomen and pelvis corresponding to abnormal soft tissue abnormality in the abdomen and pelvis. In addition, a cystic area in the right ovary seen on CT scan shows a mural nodule which shows moderate uptake of FDG on the PET portion. There is no abnormality of FDG uptake identified in the chest or rest of the visualized body.

IMPRESSION:

1. Abnormal study with findings consistent with malignancy suspicious for peritoneal implants in the abdomen and pelvis.
2. In addition, moderate uptake of FDG is identified in a nodular density along the wall of the cystic lesion in the right ovary seen on CT scan. This is slightly suspicious for an additional metastasis from the colon cancer, although primary malignancy can not be excluded.

Treatment

Chemotherapy.

Discussion

This is another case of small recurrent disease easily identified and correctly localized utilizing PET•CT in a patient with colorectal cancer. Although PET•CT can't detect microscopic disease, it is very good for finding small mesenteric implants that might be easily missed on CT alone. This patient was subsequently treated with chemotherapy without even having a biopsy to confirm recurrence because of the rising CEA levels and convincing imaging findings.

Data courtesy of Dr. Todd Blodgett, University of Pittsburgh Medical Center

* Any of the protocols presented herein are for informational purposes and are not meant to substitute for clinician judgment in how best to use any medical devices. It is the clinician that makes all diagnostic determinations based upon education, learning and experience.