

CASE STUDY

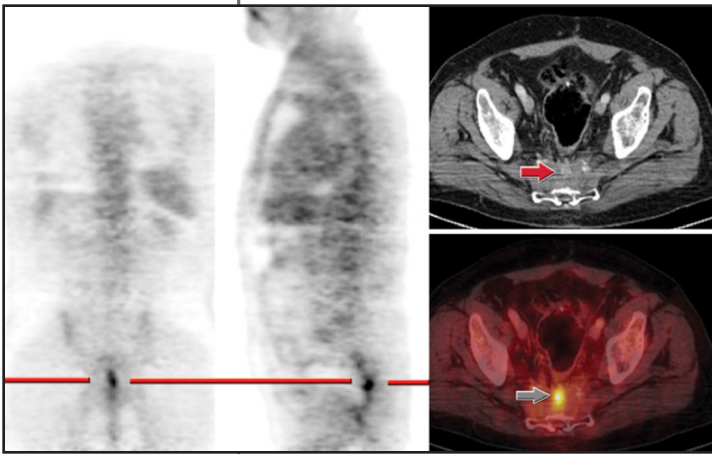
COLORECTAL

HISTORY

70-year-old man with a history of colorectal cancer status post resection, chemo and radiation therapy. The patient had rising CEA levels and a CT that showed equivocal presacral soft tissue that has been stable for over a year. The patient had a CT-guided biopsy of the presacral mass just 2 weeks prior to the PET/CT scan being performed.

PET/CT FINDINGS

Focal area of intense FDG uptake in the presacral space consistent with malignancy.



SURGERY/PATHOLOGY REPORT

Initial CT Guided Biopsy: Negative

Repeat CT Guided Biopsy: Recurrent adenocarcinoma

TREATMENT / FOLLOW UP

Chemotherapy

COLORECTAL

DISCUSSION

This patient was referred for PET/CT because of an elevated CEA level and equivocal CT finding. A recent CT scan showed a presacral area of soft tissue that had been stable for over a year and was thought to represent post treatment changes. Because his CEA level started to rise, a CT guided biopsy was performed which was negative. The patient then came for PET/CT. By looking at the PET portion of the exam, it is clear there is an abnormality and it appears that it correlates with that presacral soft tissue. After inspecting the fused image, it is clear why the first biopsy might have been negative. Although we can't be sure that there isn't microscopic disease throughout the presacral mass, it appears that only a focal area within the mass is metabolically active. In retrospect, there is a very subtle difference in attenuation, but this was not picked up prospectively.

This patient subsequently was sent for a CT-guided biopsy directed at the focal area of hypermetabolism. Fused images were printed and the radiologist took 4 samples with his needle as close to the metabolic abnormality as possible, which finally yielded the diagnosis of recurrence adenocarcinoma of the colon.