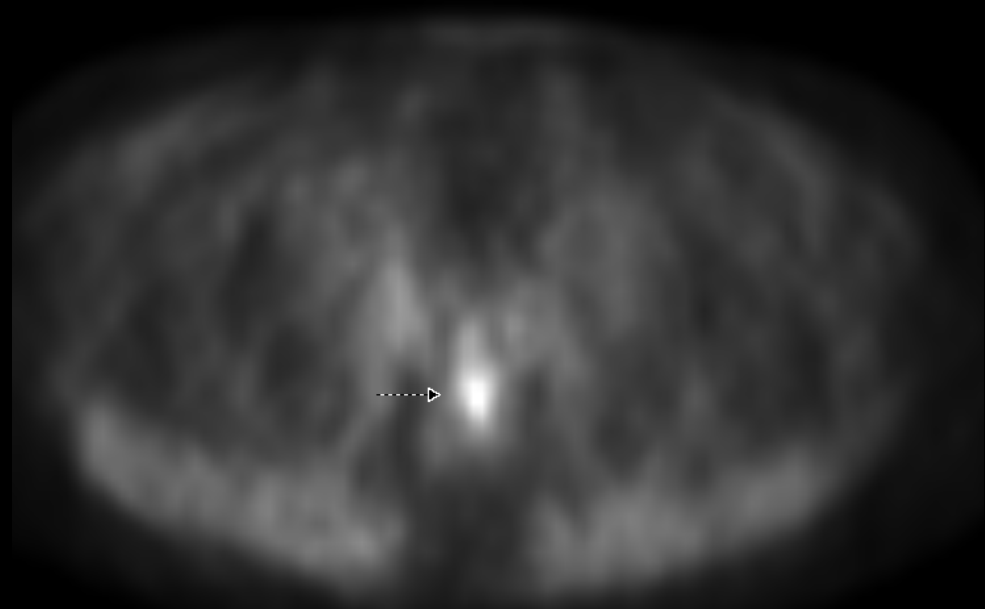
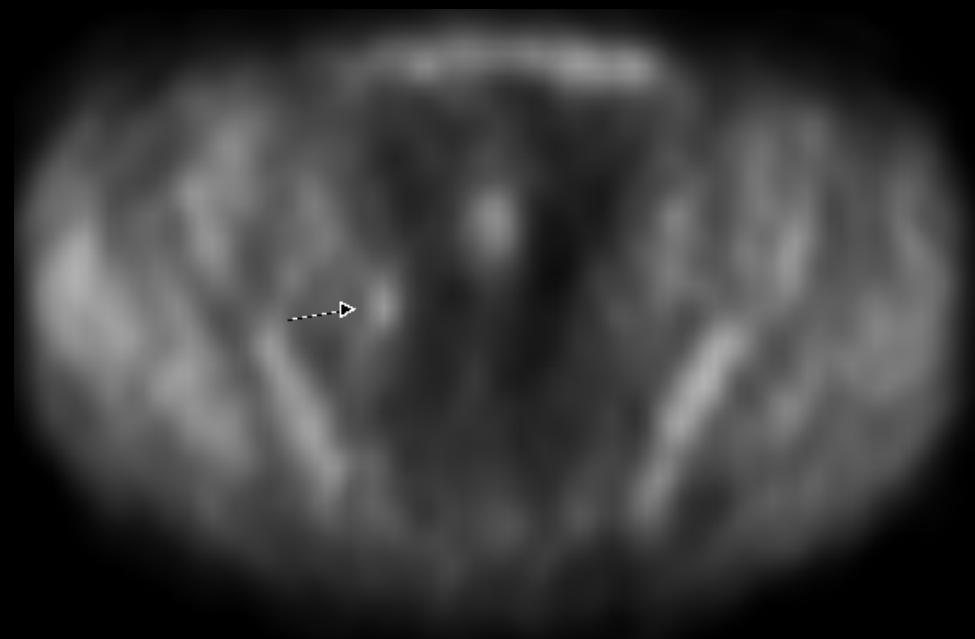


SAR Prostate Cancer DFP Teaching Case

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- 67 year old male with biochemical relapse S/P radical prostatectomy and salvage XRT.
- Increasing PSA from 0.13 to 0.42 to 1.06 ng/ml.
- AXUMIN PET/CT SCAN (18F-FACBC) was performed.





AXUMIN PET SCAN (18F-FACBC) Findings:

- Focal radiotracer uptake in prostatectomy bed (arrow).
- Mild uptake in 5mm R external iliac node (arrow).
- No abnormal uptake outside the pelvis.

AXUMIN PET SCANNING (18F-FACBC)

- Amino acids, such as leucine, methionine, and glutamine, are absorbed into the cancer cells because of the increased metabolic demands of the growing cancer cells.
- The Axumin (Fluciclovine or 18F-FACBC) is a fluorine-18 radiolabeled synthetic leucine amino acid, FDA approved for the detection of recurrent cancer with rising PSA after previous surgery or radiation.

- Axumin PET/CT can detect local recurrence in prostatectomy bed, and metastasis in pelvic LN and outside of pelvis.
- The positive predictive value of fluciclovine (^{18}F) PET/CT scanning for all sampled lesions was 62.2%, and was 92.3% and 71.8% for extraprostatic and prostate/bed involvement.
- **Reference:** Bach –Gansmo et al. Multisite Experience of the Safety, Detection Rate and Diagnostic Performance of Fluciclovine (^{18}F) Positron Emission Tomography/Computerized Tomography Imaging in the Staging of Biochemically Recurrent Prostate Cancer. J Urol 2017.