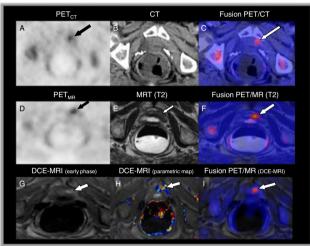
IMAGE OF THE MONTH

Sensitivity of PET/MRI to detect recurrence of prostate cancer

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A 73-year-old gentleman underwent radical prostatectomy due to prostate cancer (2003); during his follow-up he presented with biochemical recurrence (prostate-specific antigen 2 ng/ml) [1]. Positron emission tomography (PET)/CT

with [11C]choline was performed 5 min after injection of 706 MBq of [11C]choline. The images revealed a moderate uptake of the left prostate bed which had no morphologic correlate in the diagnostic CT. The configuration of the uptake and its moderate intensity (maximum standardized uptake value 2.7) made the lesion hard to be differentiated from any other unspecific finding. Hence, he underwent simultaneous whole-body PET/MRI (Siemens Biograph mMR) acquisition immediately after PET/CT. In the dynamic MRI an early contrast-enhanced lesion was found in the region of the moderate uptake seen in PET/CT. This additional finding increased the level of suspicion of malignancy.

References

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