

A rare site of hyoid bone metastasis in patients with renal cell carcinoma on ^{18}F -fluorodeoxyglucose-positron emission tomography/computed tomography scan

Sir,

A 55-year-old man presented with histopathologically proven clear cell type of renal cell carcinoma (RCC). He underwent the right radical nephrectomy and received radiotherapy to bilateral pelvic bones, right femur, D7–D9 vertebrae, and right scapulae. He was on sunitinib therapy and came to our department for ^{18}F -fluorodeoxyglucose (FDG)-positron emission tomography/computed tomography (PET/CT) scan for restaging. In the maximum intensity projection image [Figure 1a], it showed recurrence in the right renal bed and metastases to bilateral lungs and multiple skeletal sites including a rare site of hyoid bone metastases (black arrow). Transaxial PET/CT and CT images [Figure 1b and c] showed lytic lesion in hyoid bone with increased tracer uptake (white arrow), suggestive of hyoid bone metastasis.

FDG-PET/CT is useful for the restaging of patients with RCC. PET has a diagnostic accuracy of 89% for the restaging of RCC.^[1] It has a diagnostic accuracy of 84% for classifying biopsy proven anatomic lesions as malignant or benign.^[1] However, it has a high false-positive rate for the initial detection of primary RCC due to the presence of physiological excretion of FDG in the kidneys.^[2] Postnephrectomy, many patients show recurrence. The most common sites for recurrence of RCC include lung, regional lymph nodes, bone, liver, and brain.^[3] For the detection of skeletal metastases, FDG-PET/CT and bone scans have been compared. The sensitivity and specificity of FDG-PET/CT were 100% whereas the sensitivity of bone scan was 77.5% and specificity was 59.6%.^[4]

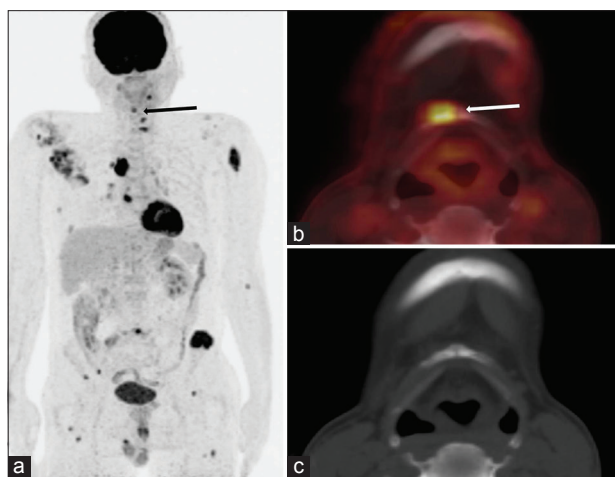


Figure 1: In the maximum intensity projection image (a), it showed recurrence in the right renal bed and metastases to bilateral lungs and multiple skeletal sites including a rare site of hyoid bone metastasis (black arrow). Transaxial positron emission tomography/computed tomography and computed tomography images (b and c) showed lytic lesion in hyoid bone with increased tracer uptake (white arrow), suggestive of hyoid bone metastasis

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Nil.

Conflicts of interest

There are no conflicts of interest.

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