Clinical picture

Distant bone metastasis from supraglottic squamous cell carcinoma

Supraglottic squamous cell carcinoma (SCC) occurs above the true vocal folds. Glottic cancers are more common than supraglottic cancers. Hematogenous distant metastasis of supraglottic SCC is rare. Our patient was a 66-year-old male with a history of heavy drinking, and he is a current smoker with a 40-year smoking history. He was diagnosed with P16 positive T2N2M0, stage 4B supraglottic SCC. P16 positive tumors have 2-year overall survival of 95% and 5-year survival rate of 80%. He was treated with cisplatin and radiation therapy. On a resting FDG-PET/CT, a hypermetabolic lesion in the left iliac bone was discovered. The metabolically active bone lesion was confirmed by biopsy for the presence of supraglottic SCC. There were no other cancers in this patient. The patient had no complaints of bone pain. The CT image showed slight sclerosis in the iliac bone, suggesting the possibility of degenerative changes (Figure 1a). On PET/CT, the hypermetabolic lesion measured SUVmax 11.3 (Figure 1b). This is the first report that shows PET/CT images of supraglottic SCC metastasis to the bone. Growth factors present in the bone create an ideal environment for tumor cells to grow. FDG-PET/CT has a sensitivity of 96% and specificity of 98.5% in the staging of head and neck cancers.

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Conflict of interest: None declared.

References


Figure 1. (a) The CT image showed slight sclerosis in the iliac bone, suggesting the possibility of degenerative changes. (b) On PET/CT, the hypermetabolic lesion measured SUVmax 11.3.
