Abstract citation ID: bvac150.1612

Thyroid

ODP512

Renal Cell Carcinoma Metastatic to Thyroid: A Case Report

Shiming XU, MD and Vafa Tabatabaie, MD

Introduction: The thyroid gland is an uncommon site (0.7%) among all distant metastasis from renal cell carcinoma (RCC). Here we report a case of metastasis from RCC to the thyroid gland, diagnosed 15 years after treatment. **Clinical Case:** A 63-year-old female, was referred to endocrine for evaluation of neck mass of several months' duration. Thyroid function test revealed mildly low TSH and normal free T4. Recent thyroid ultrasound showed multinodular thyroid, the largest nodule was in mid to upper left thyroid lobe and measured 6cm in max diameter. Biopsy of 4 thyroid nodules was performed. Three nodules were benign (Bethesda 2), but the left mid to upper 6cm thyroid nodule showed Atypia of Undetermined Significance (Bethesda 3). Due to concern of large size, potential for further growth and gradual development of local compressive symptoms, total thyroidectomy was recommended. Patient was initially hesitant, however, within several months, she developed dysphagia and progressive neck swelling, and eventually had total thyroidectomy. Surgical pathology revealed metastatic RCC involved left thyroid lobe (8.4cm in greatest dimension) and right thyroid lobe (0.3cm in greatest dimension). Immunohistochemical stain were positive for CA9, CD10, PAX8, while negative for CKIT, CK7, TFT-1, thyroglobulin, synaptophysin, chromogranin, calcitonin, and PTH. Patient reported a history of right nephrectomy in 2005 and did not require adjuvant therapy at that time. Post-operative workup including CT neck/chest/abdomen/pelvis revealed a 2.4cm left superior mediastinum mass suspicious for metastasis. Patient was evaluated by genitourinary oncology and the decision was to continue surveillance with CT every three months. A new gallbladder lesion was detected after six months, laparoscopic cholecystectomy was performed, and pathology showed metastatic RCC. **Conclusion:** This is an unusual case of metastatic RCC to thyroid gland, diagnosed 15 years after initial presentation with RCC that required only a nephrectomy. The cytology – pathology discrepancy in our case highlights the limitation of FNA in diagnosing rare thyroid masses of extra-thyroidal origin. A study has showed thyroid cytology was only diagnostic in 29.4% of population with RCC metastatsis(1). Especially when rapid growth is seen, surgery needs to be considered regardless of FNA results. Reference: 1. Khaddour K, Marernych N, Ward WL, Liu J, Pappa T. Characteristics of clear cell renal cell carcinoma metastases to the thyroid gland: A systematic review. World J Clin Cases. 2019 Nov 6;7(21): 3474-3485. doi: 10.12998/wjcc. v7. i21.3474. PMID: 31750330; PMCID: PMC6854394.

Presentation: No date and time listed