Renal Cell Carcinoma Presenting as Dysphagia

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Abstract Renal cell carcinoma presenting with dysphagia is rare. We report a case who presented with dysphagia as the only manifestations of renal malignancy. Biopsy from the pyriform fossa nodules revealed a clear cell neoplasm. Immuno-histochemical analysis of tissue confirmed metastasis of renal cell carcinoma.

Keywords Dysphagia · Metastasis · Renal cell carcinoma · Clear cell

Introduction

Renal cell carcinoma (RCC) is the third most common cancer of the urinary tract [1]. It accounts for nearly 3.9 % of new cancers and the rate of RCC has increased by 1.7 % per year for the past 10 years (<http://seer.cancer.gov/statfacts/html/kidrp.html>). It is a carcinoma with high metastatic potential and is one of the most lethal cancers of genitourinary tract. Around one third of patients of RCC present with metastasis. About 20–40 % of patients develop metastatic secondaries after diagnosis [2]. The most common sites of metastasis of RCC are lung, bones and liver. Head and neck metastasis are uncommon with only 8–15 % of head and neck secondaries being associated with RCC [3]. The thyroid, the parotid glands, the nose, the larynx and the tongue metastasis from RCC have been reported in literature [4]. Only few cases of RCC metastasizing to pharynx have been reported in literature. Though RCC can have varied presentation, we

report a unique case of RCC in a middle-aged male presenting as dysphagia due to metastasis in pyriform fossa.

Case Report

A 50-year-old gentleman presented with dysphagia of recent onset. Physical examination was unremarkable. Otolaryngoscopy and upper gastrointestinal endoscopy revealed nodules in pyriform fossa, the biopsy was taken, which revealed vacuolated cells with clear cytoplasm (Fig. 1). Immuno-histochemical analysis was done. Cells did not stain for PTAH stain and Luxol fast stain. Cells stained positive for CD-10, vimentin, CA-9 and EMA. The cells were negative for inhibin, cytokeratin 7 and S-100 P. Therefore, by the help of these findings, the diagnosis of RCC was inferred. Though the patient was under evaluation for dysphagia in the gastroenterology department, he was referred to the urology department for further workup. Ultrasound abdomen revealed a heterogeneous left renal mass (42×38 mm). Triple-phase computed tomography of the KUB region revealed heterogeneously enhancing exophytic mass of 46 mm×47 mm×56 mm seen in the middle part of the left kidney with perinephric fat stranding (Fig. 2). We did fine-needle aspiration biopsy from left renal mass which revealed clear cell carcinoma. After comprehensive workup, disease was categorised as stage 4 due to metastasis to pyriform fossa. As the patient had good performance status and only single metastasis (oligometastasis), cytoreductive nephrectomy was done, with the intention to treat. Perioperative period was uneventful. Histopathological report showed RCC clear cell type, with renal sinus fat involvement and renal capsule invasion, Fuhrman grade 3, pathological staging-pT3aNx (AJCC-2009). Patient was put on targeted therapy. Due to financial constraints of the patient, sorafenib was started instead of sunitinib. After 1 month of sorafenib, the patient started having

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Fig. 1 Low-power microscopic view of biopsy from pyriform fossa deposits

gradual improvement in dysphagia. Follow-up examination and radiological imaging at 12 weeks show no sign of active disease; after 5 months of follow-up, the patient is doing well.

Fig. 2 CECT axial film showing left renal mass

Discussion

The most common subtype of renal cell carcinoma is clear cell carcinoma which is seen in nearly 80 % of cases. RCC has a high metastatic potential and frequent metastasises to lungs, bones, liver and lymph node. There are a few case reports of pharyngeal metastasis years after nephrectomy. To the best of our knowledge, we have not found a case where initial presentation of RCC was with dysphagia alone. Dysphagia occur either due to direct infiltration of laryngo-pharynx or due to antibodies against myenteric plexus neuronal cell bodies. In our patient, dysphagia occurred due to metastatic nodular deposits in pyriform fossa.

Our patient had an unusual presentation of RCC, although dysphagia as a stand-alone symptom can have a myriad of causes, metastasis from RCC can be considered in the differential diagnosis once other more common causes have been ruled out. In patients with metastatic disease in pharynx, renal primary tumour should be considered especially when metastasis has clear cell histology. It highlights the importance of

timely search for a primary lesion in such a patient so that appropriate and timely management can be planned. After confirming the diagnosis of metastasis from RCC, the treatment protocol should be no different from the standard except for the fact that airway obstruction may require local treatment in addition to systemic immunotherapy or targeted therapy.

Conflict of Interest None.

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