

Classical presentation of Renal cell carcinoma: A case report

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Abstract

Renal cell cancer (RCC) represents 2-3% of all cancers with male predominance affecting old age. Risk factors include smoking, obesity, hypertension and genetic factors. Presentation can vary from non-visible hematuria to symptoms from metastatic disease to bones, lung, brain and lymph nodes. Only 6-10% presents with classical presentation of loin pain, loin mass and hematuria (3). We presents a case of a patient who had non-visible hematuria later progressing to metastatic renal cell carcinoma.

Introduction

Renal cell cancer (RCC) represents 2-3% of all cancers with the highest incidence in Western countries and male: female ratio of 1.5:1 (1). Peak incidence age in Sri Lanka is 50-60 years. Etiological factors include smoking, obesity and hypertension. Having a first-degree relative with RCC will increases the risk of RCC. More than 50% of RCC are asymptomatic and found incidentally on imaging (1). The classic triad of flank pain, visible hematuria, and palpable abdominal mass is rare (6-10%) and compatible with aggressive histology and advanced disease (3). Another population may present with features of paraneoplastic

syndrome and disseminated disease. Persistent non- visible hematuria may indicate underlying urological malignancy which needs further evaluation.

Case Report

Mrs. S 61 years old previously healthy female presented to the urology clinic with the complaint of left loin pain for 3 weeks duration. For the last 1 week she complains of gradually increasing left loin area swelling and hardness to touch. For the same duration she complained of a left side neck lump which was gradually enlarge in size and did not cause any symptoms. On further questioning she revealed a history of dysuria 6 months ago where she was managed as a urinary tract infection. Follow up urine investigations showed blood in the urine which was persistent for 2 months, but she defaulted until current presentation. No symptoms were to suggest distant spread of a malignancy apart from above.

On examination she was pale and having mobile left supraclavicular lymph node enlargement. Abdomen was asymmetrically distended with a well-defined firm intraabdominal mass measuring 10cm×8cm in the left hypochondrium extending into left flank. Other systems examination were normal.



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Urine analysis showed microscopic hematuria and complete count remarkable for 7.7g/dl hemoglobin level. USS abdomen revealed a solid mass measuring 8×10×12 cm arising from left kidney. Fine needle aspiration of supraclavicular LN demonstrated malignant smear. CECT IVU and Chest was ordered subsequently. It confirmed the mass to be in consistent with left side renal cell carcinoma with evidence of loco regional LN metastasis. (T2b N1 M0).

After multi-disciplinary team discussion left side open radical nephrectomy was done. There was no ipsilateral adrenal gland involvement so it was preserved. There were extensive para-aortic LN enlargement which were not dissected. Renal vessels and IVC appeared clear of tumor. Patient recovered fully within 2 days and no complications were encountered. Histology revealed type 1 papillary carcinoma of Fuhrman grade 1. Tumor emboli were seen in perihilar vessels. Later patient was referred to oncology care and started on systemic therapy with tyrosine kinase inhibitors.

Discussion

Loin is the area of abdomen between the 12th rib and the iliac crest. Lump in the loin can be intraabdominal or extra abdominal in origin. Revising the organs in that region differential diagnosis includes lump arising from spleen, kidney, descending colon, small bowel or rarely retroperitoneum. Classical examination findings like

moving with respiration and alternative bands of resonance over the lump may help to differentiate renal masses from others. This patient belongs to the rare group of classical presentation of RCC, hematuria, loin pain and loin mass. This patient has had microscopic hematuria preceding loin mass, but lost to the follow up. Palpable renal mass indicates advanced disease and poor prognosis (1). Curative surgery could be feasible in this patient if identified early. That indicates the importance of evaluating non-visible hematuria as it can harbor underlying malignancy. Staging imaging puts the patient to locally advanced (stage 3) disease category, where curative surgery is not possible. But cytoreductive nephrectomy with systemic therapy has better survival than systemic therapy alone (2). That is the reason for nephrectomy in this patient with the added benefit of symptoms alleviation. This patient had type 1 papillary cancer which has good prognosis compared to clear cell carcinoma but overall prognosis seems to be poor.

Conclusion

This case report emphasizes the importance of evaluation of non-visible hematuria which may identify early disease for curative intervention.

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