

BILATERAL RADICAL NEPHRECTOMY & ADRENALECTOMY – A RARE CASE REPORT

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Introduction

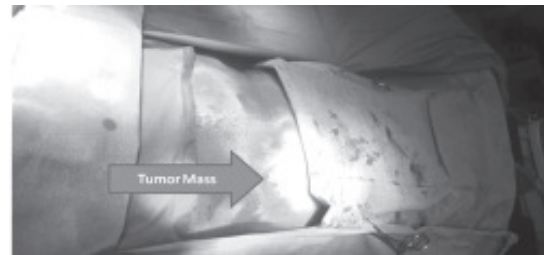
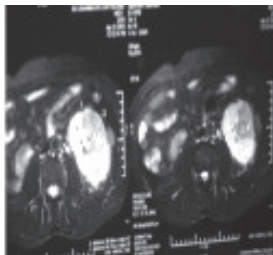
Paired organs have one feature in common; they can be affected by exactly the same carcinogenic influences, both genetic and environmental¹. Understanding the risk of bilateral kidney cancer is particularly relevant because the function of this organ is vital and removal of the remaining kidney as a result of bilateral cancer may require life-long hemodialysis^{2,3}. Hence if patients at high risk of developing bilateral metachronous kidney cancer could be identified early, a longer and more intensive follow-up schedule would be undertaken, with the advantage of earlier cancer identification⁴.

Case Report

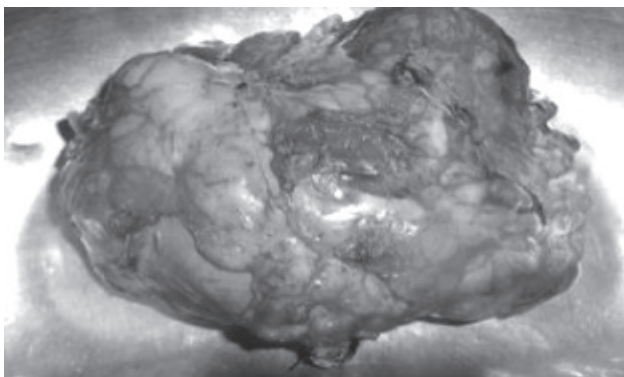
Mr. Golam Rahman 60 yrs presented with unexplained weakness & fatigue, wt loss & loss of appetite of 03

months duration. There is no haematuria, cough, bone pain and jaundice. He had history of radical nephrectomy (Rt) in 2000. He is smoker & Hypertensive for 15 yrs but non diabetic. Clinical examination revealed average built (BMI 20), anaemic (Hb- 8gm/dl), palpable left renal mass. Hematological and biochemical parameters are normal except raised S. Creatinine (1.9 mg/dl). CXR is unremarkable. USG of whole abdomen shows multiple SOL in the left Kidney. Bone scan was negative for metastasis. MR-Urogram revealed multifocal SOL in the left kidney suggestive of RCC. FNAC confirmed as renal cell carcinoma.

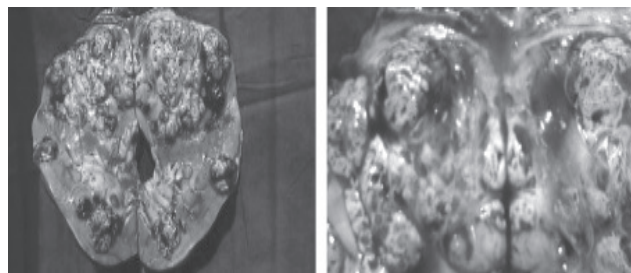
MR Urogram: Multiple SOL in the left Kidney with renal vein involvement



MR Urogram: Multiple SOL in the left Kidney with renal vein involvement



Specimen



Multi Focal RCC

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The patient was prepared and a multidisciplinary team was formed comprised of urologist, nephrologist, oncologist, endocrinologist, intensivist and anesthesiologist and counselled with family members and permanent jugular catheter was placed on the day before surgery. Laparotomy was performed on 5th April 2015 through 11th Rib bed. Lt kidney was explored,

assessed and mobilized and radical nephrectomy with adrenalectomy was performed and patient shifted to critical care centre. The patient was extubated on 2nd POD and dialysis started on 3rd POD. His post op period was hectic with episodes of hypo & hypertension, severe acidosis, dyselectrolytemia, ICU psychosis and sepsis. All the events were managed successfully. The patient recovered and discharged after three weeks and advised for regular follow up and dialysis. The patient is still alive.

Discussion

Bilateral organs have one common features. It can be affected by the same carcinogenic influences both genetic & environmental. So understanding the risk of bilateral RCC is relevant because of vital organ^{4,5}. The removal of bilateral kidney requires life long hemodialysis. The behavior of RCC is unpredictable, metastasis may be found synchronously with the primary tumor or in various organs many years after treating the primary RCC. Although RCC can metastasize to almost every organ, the most common metastatic sites are the lungs, abdomen, bones and brain. Contralateral adrenal metastasis is rare (1.1-2.5%). Ipsilateral adrenal metastasis is also rare (3.4%). Bilateral adrenal metastasis is also rare (0.2-.05%)^{5,6}. In addition to being able to metastasize to numerous different organs, RCC can recur or metastasize many years after resection of the primary tumor⁷. So bilateral radical nephrectomy and adrenalectomy increases morbidity & even mortality due to acute adrenal insufficiency⁸. The patients at high risk of developing bilateral metachronous kidney cancer should be identified as early as possible and treatment should be individualized. A more intensive follow up schedule should be undertaken.

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