

中文題目：腎臟移植受贈者發生於原本腎臟之腫瘤

英文題目：Renal Mass from Native Kidney in Kidney Transplant Recipient

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Background: Kidney transplant recipients have a higher risk of developing or dying from cancer than the general population. Carcinogenesis in either native or grafted kidney is not rare. The increased risk of cancer is multifactorial and can be attributed to oncogenic viral infection, use of immunosuppression, and altered T cell immunity. Thus, regular image and laboratory tests follow up is mandatory. Herein, we present a case of kidney transplant recipient with a complicated native renal mass, which was found via the routine ultrasound exam.

Case Presentation: A 42-year-old male patient with history of lupus nephritis received deceased donor kidney transplantation in 2014. He received pulse steroid and interleukin-2 receptor antagonist as induction immunosuppressive agents and oral prednisolone, tacrolimus, and mycophenolate mofetil as current maintenance agents. His serum creatinine remained at 2 mg/dL after the surgery and during the follow-up period. 5 years later, in a routine abdominal ultrasonography exam, a huge mass was detected in his retroperitoneal area, adjacent to left native kidney. Magnetic resonance imaging with contrast agent showed lipomatosis of left kidney, but renal tumor couldn't be ruled out. He then received left nephrectomy, and the specimen obtained from surgical excision revealed multiple lipid-rich tumors surrounding the renal parenchyma. Pathology exams confirmed renal replacement lipomatosis (RRL), and a tiny renal cell carcinoma (greatest diameter about 0.6 cm) was detected in the cortex. After the operation, no local recurrence nor distant metastasis were found during follow up.

Discussion: Renal replacement lipomatosis is characterized by atrophy and destruction of renal parenchyma, and is often associated with unilateral chronic renal infection, hydronephrosis, pyonephrosis, and calculous disease. It should be differentiated from xanthogranulomatous pyelonephritis which was characterized by lipid-laden macrophages aggregation under microscopy exam. Although RRL is a benign disease, nephrectomy is usually the treatment of choice on account of minimal or absent renal function on the affected kidney. In our case, surgical intervention is mandatory because this patient is a high-risk candidate for post-transplant malignancy related to his immunocompromised status. A coexisting early stage renal cell carcinoma was detected over this surgery.