

**中文題目：**腎臟多個低血管的腫瘤-罕見的個案與其鑑別診斷

**英文題目：**Multiple hypovascular tumors in kidney – a rare case report and differential diagnosis

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## **Introduction**

Sonography, computed tomography (CT), and magnetic resonance imaging (MR) imaging can be successfully used in the detection and characterization of renal mass. When characterizing renal mass, the main question is whether the mass represents a surgical or nonsurgical lesion, or follow up studies are a reasonable option. The accurate diagnosis of a renal mass depends on many factors, including the clinical history, physical examination, imaging study, and sometimes renal biopsy could be considered.

## **Case Report**

A 52-year-old female experienced epigastralgia with hunger pain and right flank abdominal pain without radiation intermittently for three months. Esophagogastroduodenoscopy revealed gastric ulcer (A2) at cardiac region and lower body, so oral proton pump inhibitor was given. However, right flank pain persisted and further abdominal sonography demonstrated right hypo-echogenicity renal mass over right upper and lower pole without hydronephrosis or kidney enlargement. Urine routine revealed microscopic hematuria with RBC count 3-5 in high power field. Normocytic anemia without neuropenia or thrombocytopenia, no coagulopathy and normal liver and renal function were found. Abdominal CT showed hypovascular tumors at the upper, lower poles, middle portions of the right kidney with Size 3.3cm, 2.5cm, and 2.8cm without metastatic lymphadenopathy. Further abdominal MRI demonstrated multifocal hypovascular hypercellular solid tumors of the right kidneys with significantly decreased apparent diffusion coefficient (ADC) without enhancement during arterial phase of dynamic study and left renal hilar lymphadenopathy. CT guide renal biopsy confirmed diffuse large B lymphoma. Positron Emission Tomography- computed tomography (PET/CT) showed compatible with diffuse large B cell lymphoma (stage IV), which involvement in right kidney and stomach. Normocellular bone marrow and normal chromosome were noted by bone marrow biopsy. The patient received 6 cycles of R-CHOP chemotherapy. However, the patient expired because severe infection finally.

## **Discussion**

Renal involvement in lymphoma is usually seen as a part of disseminated disease. 37% to 47% of renal lymphoma occurs due to dissemination of an advanced systemic disease, while 0.1% is due to primary involvement of the kidney. Lesion can be solitary masses (10-20%) or multiple masses (60%). They are generally bilateral and present extension by contiguity (25%-30%), diffuse infiltration (20%) or perirenal involvement (10%). Renal lymphoma may present as renal mass producing symptoms and imaging characteristics resembling renal cell carcinoma (RCC). The differentiating features include absence of calcification, post contrast homogenous attenuation, absence of renal vein thrombus and absence of a mass effect on renal vessels in renal lymphoma. Lower signal intensity on unenhanced T1-weighted images than normal renal cortex and less enhance on early gadolinium-enhanced images can differentiate renal lymphoma from renal cell carcinoma in MRI. On PET/CT, FDG uptake by the lymphoma lesions was higher than the renal clear cell carcinomas. Also differing from renal cancer, lymphoma in the spleen, uterus, and bone marrow can easily be diagnosed by FDG PET/CT. Herein we demonstrate a case of lymphoma with renal involvement and show the image to differential diagnosis between renal lymphoma and RCC and confirm our diagnosis.