Renal Papillary Adenoma in Autosomal Dominant Polycystic Kidney Disease

A 41-year-old man was admitted to the emergency department with left flank pain. He was on maintenance hemodialysis due to end-stage renal disease with autosomal dominant polycystic kidney disease (ADPKD) since 1 year earlier. The laboratory data showed leukocytosis and anemia. Contrast-enhanced abdominal computed tomography imaging revealed enlarged kidneys with multiple renal cysts. The left kidney had a 10 × 7-cm hemorrhagic cyst (arrow). Left nephrectomy was performed following aggravation of flank pain with a decrease in hemoglobin level (from 8.2 g/dL to 7.3 g/dL). Histopathologically, renal cysts had papillary structures which were lined by cells with small dark nuclei and scant cytoplasm. Tumor cells showed immunoreactivity for cytokeratin 7 (CK7) and α-methylacyl-coenzyme A racemase (AMACR). These pathologic findings were consistent with renal papillary adenoma. Renal papillary adenoma defines papillary or tubular architecture of low nuclear grade with a maximum diameter of 5 mm. It has been postulated that papillary adenoma may progress to papillary renal cell carcinoma because of high coexistence, histopathological similarity, and similar genetic alterations between papillary adenoma and papillary renal cell carcinoma. Renal papillary adenoma frequently develops in patients with acquired renal cystic disease and long-term hemodialysis. We present a case of renal papillary adenoma in a patient with ADPKD, who has relatively short duration of hemodialysis and present with huge hemorrhagic cyst. Renal papillary adenoma should be considered in patients with ADPKD who have hemorrhagic cyst.

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REFERENCES