

LETTER TO THE EDITOR

Microscopic small clear cell papillary lesion of the kidney with long-term hemodialysis patient: Is this clear cell papillary adenoma?

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Dear Editor,

The concept of clear cell papillary renal cell carcinoma (RCC) has been integrated into the renal classification of recent International Society of Urologic Pathology [1-3]. However, this disease category is nowadays controversial because no patients with this disease behave in an aggressive fashion [4, 5]. It is well known that clear cell papillary RCC occurs in end-stage renal disease (ESRD), acquired cystic kidney (ACD) and even normal kidney [2, 3, 6, 7]. In our experience, I often encounter microscopic small papillary lesion with clear cells in kidney of patients with chronic renal failure, particularly receiving hemodialysis. Here, we present such a case.

The patient was 72-year-old Japanese man. He has received the hemodialysis for 8 years because of chronic renal failure with unknown cause. He also had the past history of left renal cancer. After he died of sepsis because of lung abscess and pyogenic spondylitis, an autopsy was performed. The small lesion measuring 2mm was observed in the cortex of the right kidney. The lesion consisted of columnar cells with clear cytoplasm and papillary architecture, partly forming cystic space and depositing psammoma bodies (Fig. 1A). The cytologic atypia was mild and

there were no mitotic figures (Fig. 1B). Immunohistochemically, the lesion was diffusely positive for cytokeratin 7 (Fig. 2), but negative for TFE3. Although I tried the immunohistochemistry of CA9, RCC Ma, CD10 and AMACR, the lesion disappeared because of its small size.

The immunohistochemical phenotype of this small lesion seems to be consistent with that of clear cell papillary RCC [8, 9]. According to the recent classification, papillary adenoma is defined as tumor with papillary or tubular architecture of low nuclear grade and 5mm in diameter or smaller [10]. Accordingly, I suggest that small clear cell papillary lesion may be actually clear cell papillary adenoma as a precursor lesion of clear cell papillary RCC arising in ESRD or ACD [2, 3]. Otherwise, as the majority of previously reported clear cell papillary RCC showed pT1a in stage, I speculate that most cases with clear cell papillary RCC may be really benign neoplasm [4, 5, 11-14].

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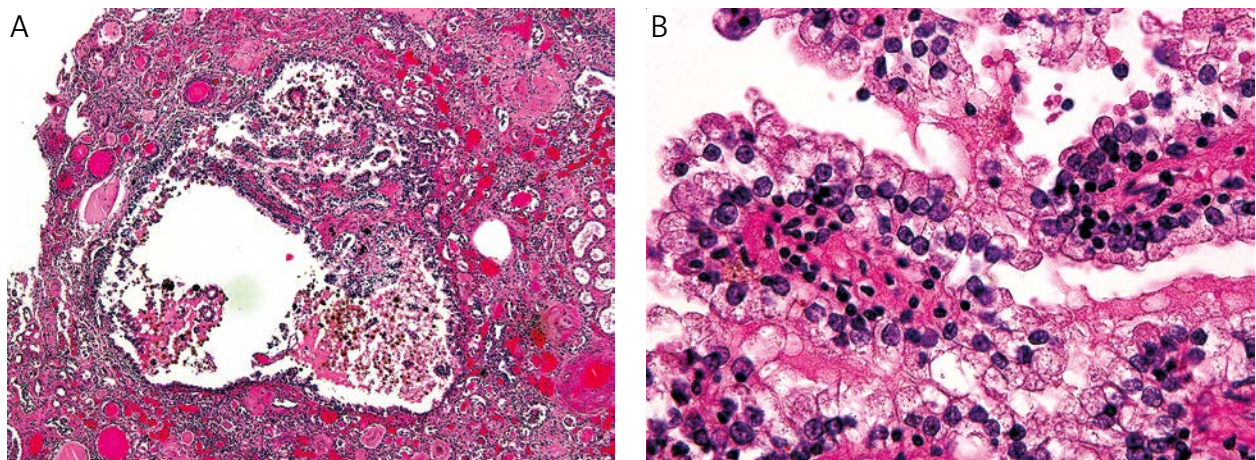


Fig. 1. Histological findings. A) The lesion consists of clear cell with papillary configuration. B) The constituting cells lack significant cytologic atypia

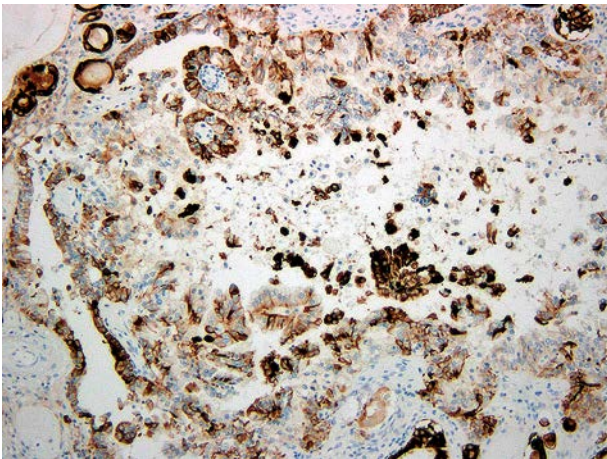


Fig. 2. Immunohistochemical findings. The constituting cells are diffusely positive for cytokeratin 7

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