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Case Report

Multilocular cystic renal cell carcinoma with lymph node metastasis: a case report

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Abstract: Patient, female, 30 years old, was admitted because of "finding out the right kidney cyst four days". Strengthening CT examinations showed that it was may be right kidney cyst. On May 13, 2015, we did right renal cyst resection under general anesthesia, intraoperative frozen section pathology: we cannot rule out Multilocular cystic renal cell carcinoma, to retain the involved kidney. Routine postoperative pathology: "cystic renal clear cell carcinoma". On May 27, 2015 we did right kidney radical resection under general anesthesia. Pathology: small areas of residual renal cell carcinoma. Renal 2/3 of pedicle lymph nodes were clear cell carcinoma metastasis or invasion, and connective tissue adhesion lymph node were metastasis clear cell carcinoma. To be given IFN-a, 9MIU, IH, 3 times/week for 12 weeks, followed up for six months alive after operation.

Keywords: Multilocular cystic renal cell carcinoma, lymph node metastasis, diagnosis and treatment

*Multilocular cystic r*enal cell carcinoma (MCRCC) is currently classified as a well-differentiated clear cell renal cell carcinoma [1]. This tumor accounts for approximately less than 4% of all renal tumors [2, 3]. There are no reports of metastasis, vascular invasion or sarcomatoid change in MCRCC [2]. Our hospital admitted a patient of multilocular cystic renal cell carcinoma with lymph node metastasis in May 2015, the report is as follows.

Patient, Female, 30 years old, admitted to the hospital because of "examination found the right kidney cyst four days". This patient premarital examination in local hospitals in the May 7, 2015, found the right kidney cysts through ultrasound. Thus, performed the kidneys CT examination in our hospital, the result is prompt right kidney mass, initial consideration is benign lesions, checked the kidneys strengthened CT examination further, the results suggested that the right kidney cyst, considered the complex renal cysts. There was no abdominal pain, frequent urination, urgency, dysuria, hematuria, nausea, vomiting discomfort with patient. Physical examination: mild percussion pain in the right kidney area. Alkaline phosphatase: 52 U/L. Ultrasonography: explored a solid heterogeneous echogenic mass in the right kidney collecting system, border clearance, the size is about of 3.8 cm × 5.1 cm. Strengthen kidneys CT: irregular, low density within the right kidney parenchyma, realm is still clear, size is about of 6.9 cm × 4.6 cm, within less homogeneous density, visible punctate calcification high density; No significant enhancement in the lesion after Strengthened. Right pelvis slightly expanding, no abnormal density within the remainder of the renal parenchyma, homogeneous enhancement in the enhanced renal parenchyma, no obvious abnormalities. The location, size and shape of contralateral kidney were no abnormalities, uniform density within the renal parenchyma, no obvious abnormalities enhanced. Diagnosis: right renal mass, considered benign lesions, the most likely is a complex renal cysts (**Figure 1**). Thoracic, lumbar and pelvic X-ray were no obvi-

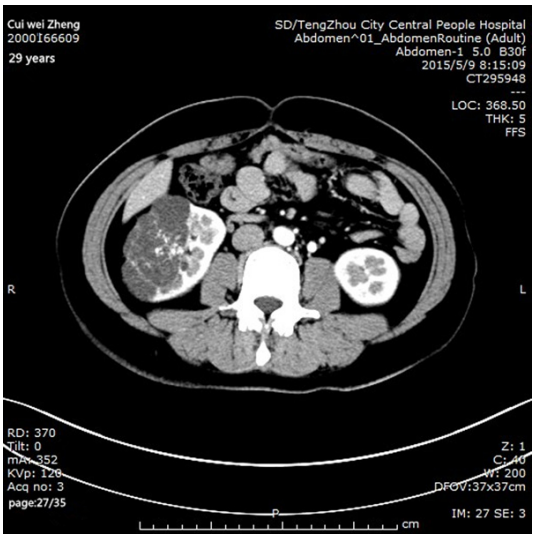

Figure 1. Enhanced CT Manifestation of renal: right renal mass, considered benign lesions, the most likely is a complex renal cysts.

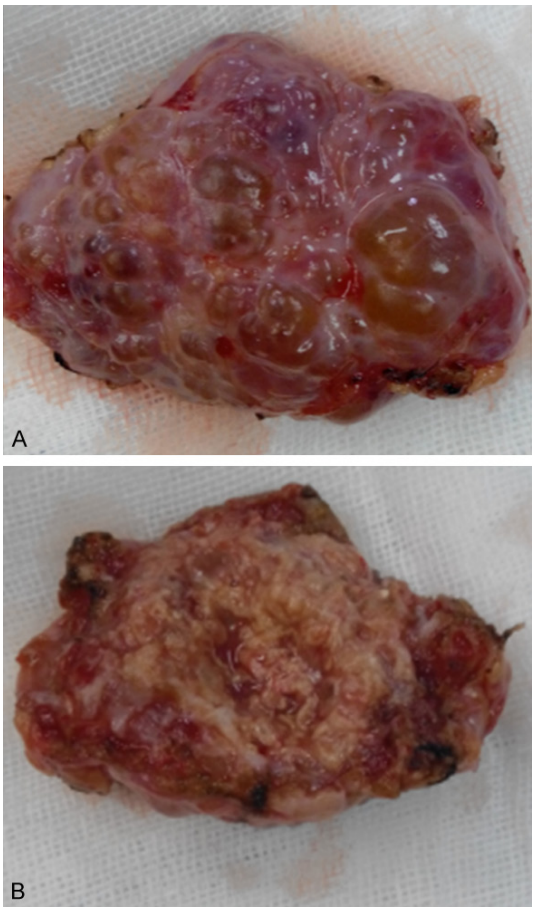

Figure 2. A. Multilocular cystic renal masses; B. Cut multilocular cystic renal masses.

ous abnormalities prompted. Patient was finished the operation of right renal cyst resection under general anesthesia in May 13, 2015. Saw a kidney cyst during surgery in the lower pole of the right kidney, the size was about of 7.0 cm × 6.0 cm. To free the renal cysts sufficiently, to cut the cyst along the edge of the renal parenchyma, the cyst was multilocular, necrosis-like material, calcification within the cyst, to excise the cyst and contents and to send quick frozen pathology (**Figure 2A**). Frozen pathological: cystic tumors were calcification and composed of different size of the cyst, seen foci of transparent mononuclear cells in the part of the of interval fiber. We cannot rule out multilocular cystic renal cell carcinoma. We inform the rapid freezing results and treatment programs to family members of patients and communicate with them adequately; they are opposed to radical nephrectomy. pathology results (May 20, 2015): Grossly: gray red, gray organize, volume as about of 5.5 cm × 2.5 cm, to cut tumor, gray ash red honeycomb in section, the diameter of capsule was about of 0.1 cm-0.5 cm, containing yellow liquid, the wall was smooth, thickness was about of 0.1 cm (**Figure 2B**). Endoscopic Description: wall-like tissue, cord-like transparent cells (**Figure 3A**). Professor Zhang Jianping of Qilu Hospital conducted a consultation on the biopsy; he believed kidney shape in line with cystic clear cell renal carcinoma. Patients underwent operation of right radical nephrectomy surgery under general anesthesia in May 27, 2015. Two enlarged lymph nodes of renal pedicle were found and removed in surgery, then sent for pathological examination with kidney, perirenal fat, adrenal gland and other regional lymphatic tissues. pathology results (May 30, 2015): Grossly: 1, a right kidney, the volume was 9 cm × 6 cm × 4 cm, ureteral length was 8.5 cm, ureter diameter was 0.2-0.5 cm. We cut right kidney, saw a gray swollen in pole of the right kidney, tumor section was gray red, crisp, the maximum cross section area was 3.5 cm × 3.0 cm, and renal pelvis tumors did not invade renal surrounding capsule fatty tissue, the tumor aspect was necrosis mostly. 2, right adrenal gland: a sallow organization, volume was 5.0 cm × 2.5 cm × 1 cm, section was golden yellow, the texture was flexible, no obvious abnormalities. 3: renal pedicle lymph nodes: four lymph nodes, diameter was about of 1.0

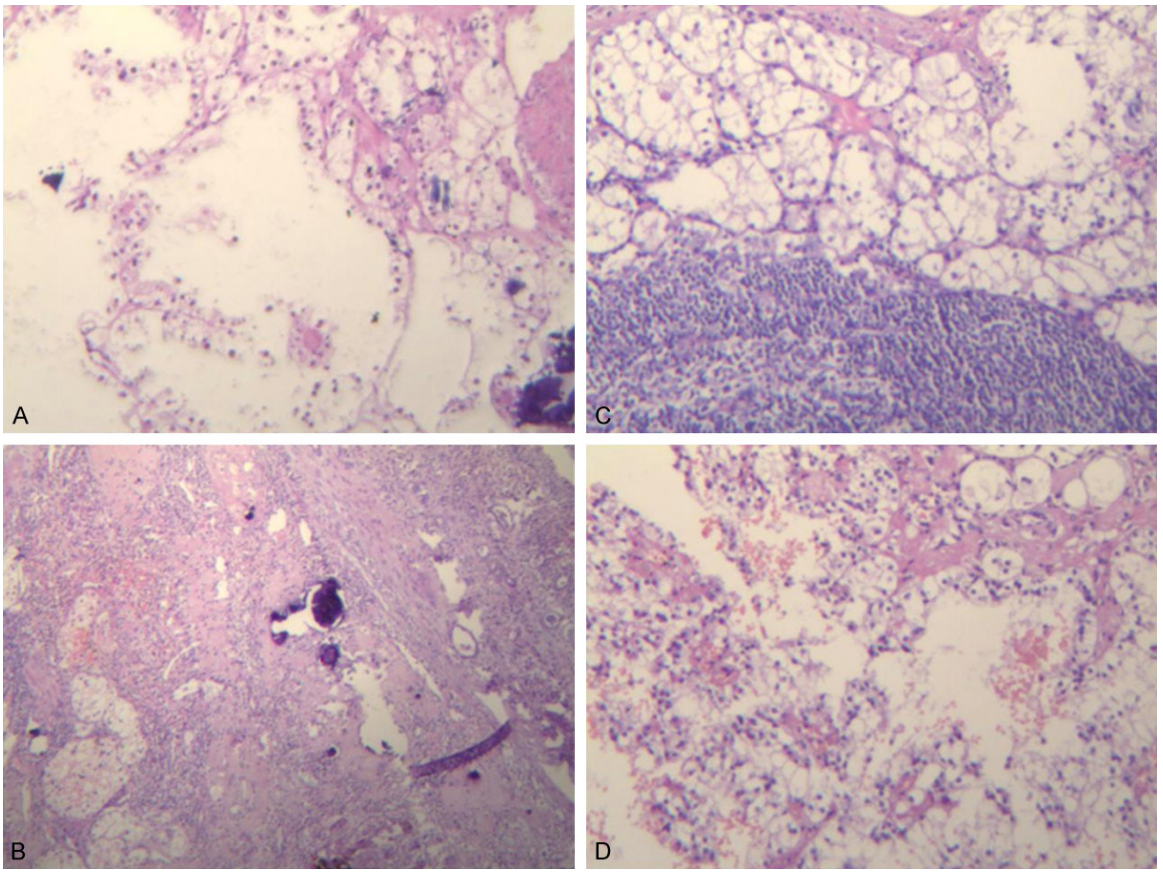

Figure 3. A. Wall-like tissue, cord-like transparent cells (HE staining: 10 × 10); B. Kidney tissue, local hemorrhage and necrosis, the small area of transparent alveolar cells (HE staining: 10 × 4); C. Renal pedicle lymph node were metastasizing clear cell of carcinoma (HE staining: 10 × 10). D. Clear cell carcinoma metastasis or invasion inside tissue adhesion to lymph node (HE staining: 10 × 10).

cm-1.2 cm. Endoscopic Description: kidney tissue, local hemorrhage and necrosis, the small area of transparent alveolar cells (**Figure 3B**). Pathological diagnosis: kidney tissue, a small area of residual renal cell carcinoma (must be mass excavation area), no cancer invaded the pelvis, cancer cells did not infringe the ureter cutting edge, adipose tissue were fibrosis, giant cell reaction, in addition "Right adrenal tissue" censorshiped was no cancer, then "renal pedicle surrounding lymph nodes", censorshiped, which has two-thirds were clear cell carcinoma of metastasis (**Figure 3C**), checked to see clear cell carcinoma metastasis or invasion inside tissue adhesion to lymph node (**Figure 3D**). Patient received treatment after surgery: IFN-a, 9MIU, IH, 3 times/week for 12 weeks, she was alive at follow-up within five months.

Disclosure of conflict of interest

None.

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