

Misdiagnosed as renal hemorrhage following biopsy: An unusual abdominal wall hematoma

Bo Lin^{1,3}, Jie Zheng^{2,3}, Minmin Wang^{1,3}, Qiang He^{1,3*}

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ABSTRACT

We described that a 55-year-old man was referred to our hospital for a 15-day history of onset acute kidney injury. An unusual hematoma in posterior abdominal wall following renal biopsy was revealed due to the

injury of abdominal wall vascular, which was initially misdiagnosed as renal hemorrhage. After conservative treatment, the patient's symptoms slowly improved 1 week later and the hematoma was not increasing in size. Conservative treatment for abdominal wall hematoma is allowed if the patient's condition is stable. Invasive approaches or surgery will be effective in controlling active bleeding.

Key Words: Renal biopsy; Misdiagnosed; Renal hemorrhage; Abdominal wall hematoma

CASE REPORT

A 55-year-old man was referred to our hospital for a 15-day history of onset acute kidney injury. Renal biopsy was performed using 18-gauge needle under sonographic guidance. He complained right back pain about 3 hours after renal biopsy without gross hematuria. No abnormality was found by the first bedside ultrasonography. His vital signs were stable, but with a pulse of 100 beats per minute. Observation treatment for the patient was ordered by the doctor on duty. However, the back pain was not relieved in the following hours, and rapid blood test showed a sharp decrease of hemoglobin from 10.5 g/dl to 7.2 g/dl. The second bedside ultrasonography revealed a hypoechoic mass behind the right kidney. So, the perirenal hematoma was initially diagnosed based on the clinical manifestations and laboratory tests. Therefore, renal artery embolization was advised by the surgeons, but refused by the patient and his family because of the expensive cost. The patient was kept under observation all night. Fortunately, the patient's condition and the hemodynamic monitoring were stable. Unexpectedly, computed tomography in the next morning demonstrated a 15*10 cm hematoma in posterior abdominal wall (Figure 1). It was an abdominal wall hematoma due to the injury of abdominal wall vascular, not from the kidney (Figure 2). His family decided to take conservative treatment in the following days. Regularly performed computed tomography scans confirmed there was no enlargement of the hematoma. The patient's symptoms slowly improved, and the hemoglobin concentration rose to 8.8 g/dl 1 week later [1-5].

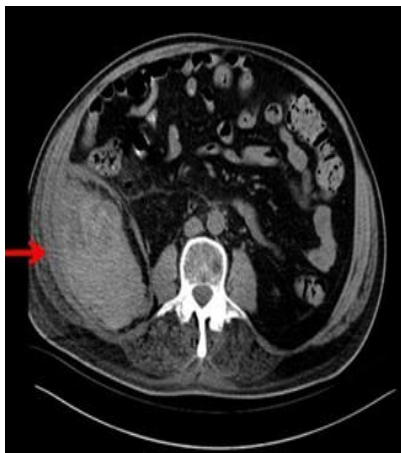


Figure 1) Computed tomography scan revealed a mass in the posterior abdominal wall.

¹Department of Nephrology, Zhejiang Provincial People's Hospital, Hangzhou, PR China

²Department of Radiology, Zhejiang Provincial People's Hospital, Hangzhou, PR China

³People's Hospital of Hangzhou Medical College, Hangzhou, PR China

*Correspondence: Qiang He, Department of Nephrology, Zhejiang Provincial People's Hospital, Hangzhou, PR China, E-mail: Doctor_linbo@163.com.

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Figure 2) (a) Computed tomography confirmed that the hematoma (b) Did not come from the right kidney.

DISCUSSION AND CONCLUSION

Renal biopsy can provide a definitive histological diagnosis of kidney disease, and it is particularly helpful in patients with proteinuria, hematuria or acute kidney injury. Bleeding is a common complication of percutaneous renal biopsy. Post-biopsy scanning has shown that the majority of patients will develop a perirenal hematoma. However, abdominal wall hematoma following renal biopsy is a very rare complication. So, it might be initially misdiagnosed as renal hemorrhage. Acute abdominal pain in the abdominal wall is always the primary symptoms. Ultrasound and computed tomography are the most helpful imaging modalities to reveal the renal hematoma. But, computed tomography is more sensitive and specific in detecting a hematoma in other parts of the abdomen. Conservative treatment for abdominal wall hematoma is allowed if the hematoma is not increasing in size and the patient's condition is stable. Transcatheter arterial embolization or surgery will be effective in controlling active bleeding for a patient when conservative treatment failed.

DECLARATION OF PATIENT CONSENT

The authors certify that they have obtained all appropriate.



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