

Spontaneous Subcapsular Hematoma of the Kidney due to Acute Pyelonephritis (APN) : A Case Report

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Perirenal hematoma commonly arises from a traumatic renal injury or occurs as a severe complication after kidney-damaging surgery. Occurrence of spontaneous perirenal hematoma, however, is still uncommon. The most frequently identified cause of non-traumatic perirenal hematoma is renal neoplasm, such as angiomyolipoma and renal cell carcinomas, followed by vascular disease and hemorrhage. Herein, we report a 62-year-old woman with DM, who had experienced acute pyelonephritis and perirenal hematoma caused by *E. coli* despite appropriate antibiotics therapy. The patient was successfully treated with antibiotics and percutaneous drainage.

Case : A 62-year-old diabetic female was admitted with a 10 day history of fever and right flank pain. Initial her Hb A1c was 11.1% and CRP was 20.53 mg/dL. Urinalysis findings were nitrite (+), bacteria (+). After admission, the fever subsided and symptomatic improvement was noticed. *E. coli* was found in urine culture upon admission. On the fourth day of the hospital stay, right flank pain increased suddenly despite use of antibiotics empirically prescribed for the treatment of APN. On laboratory findings, hemoglobin rapidly decreased from 9.8 to 8.2 g/dL. Abdominal CT showed the subcapsular hematoma with pyelonephritis in the right kidney. Subsequent percutaneous drainage of this subcapsular hematoma was performed and showed evidence of hemorrhagic fluid with no growth during a bacteriologic exam. Renal angiography demonstrated an semilunar avascular zone within the right kidney with no evidence of tumors or vascular abnormalities, such as arteriovenous malformation or fistula. A serial abdominal CT angiography was performed at the 20th day of hospitalization. The patient's state showed an improvement of perirenal hematoma and pyelonephritis. Conclusively, the possibility of subcapsular renal hematoma in the course of acute pyelonephritis is a rare complication.