Case Report
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A Case Report: Renal Colic in the Pelvic Kidney

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Abstract

Renal colic is a frequent cause of application to the emergency room. Although it is a condition that requires conservative treatment, it can often be confused with clinical conditions that may require surgical intervention and complications such as urinary tract infection and acute kidney failure mayor cur. In this case, were viewed 49 year old male patient who has lower abdominal pain due to ureteral stone and did not know that he had a pelvic kidney. Because of leukocytosis and vomiting, acute appendicitis was considered as prediagnosis, but abdominal CT imaging of patient showed a left pelvic kidney and 5 mm calcule in the middle part of the ureter.

Keywords: Calculus, Pelvic kidney, Renal ectopia

Introduction

Renal colic is afre quent cause of application to the emergency room. Although it is a condition that requires conservative treatment, it can cause severe pain to agitate thepatient. It can often be confused with clinical conditions that may requires urgical intervention, such as abdominal aortica neurysm rupture and acute appendicitis. Besides complication ssuch as urinary tract infection and acute kidney failure mayoc cur[1]. Therefore, management of these patients in the emergency department is important. In addition, anatomic variations mayoc casionally complicate diagnosis in patients presenting with abdominal pain. In this case, were viewed 49 year old male patient who has lower abdominal pain due to ureteral stone and did not know that he had a pelvic kidney.

Case Presentation

A 49-year-old male patient was admitted to the emergency department with complaints of abdominal pain that began several hours earlier. There was significant pain in the right lower quadrantand suprapubic region of abdomen. The pain was colic and accompanied by vomiting. He had no flank pain. He had no known disease. He did not have a history of surgery and no drug use. Her vital signs (blood pressure: 130/80 mm / Hg, pulse: 92 / min, oxygen saturation: 96%) were stable. Physical examination revealed sensitivity and rebound in the right lower quadrantand suprapubic region. Costo vertebra langle sensitivity was not present. In laboratory parameters, leukocyte count was 13.9 10^3 / uL and neutrophil count was 11.5 10^3 / uL Hemoglobin was 11.4 g / dL. Liver and kidney function test sand electrolytes were with in normal range. Urinean alysis revealed 3+ erythrocytes. Diagnostic ultrasound was not performed due to malfunctioning ultrasound device. The patient's examination findings were accompanied by vomiting and leukocytosis, so an abdominal tomography with intravenous contrast was performed with acute appendicitis andrenal colic pre-diagnoses. Abdominal CT showed a left pelvic kidney with a malrote appearance. Grade II pelvicalic ealectasia was observed in the left kidney and a 5 mm calcule was observed in the middle part of the ureter. Appendix size was with in normal range and no signs of appendicitis were detected.

Analgesic treatment was performed in the patient who was diagnosed as renal colic by tomography. The patient, who was relieved after the follow-up, was discharged with the suggestion of polyclinic control and analgesic prescription. In follow up, ureteral calculifell into the bladder and the dilatation of the pelvicaly ceal system regressed a few days later.

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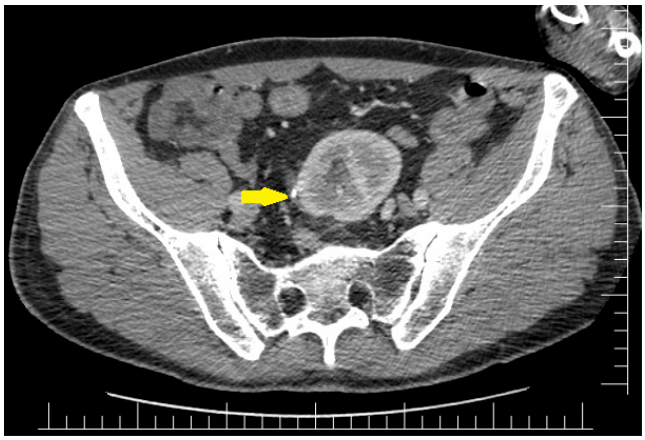

Figure 1. Lower abdominal tomography with intravenous contrast (ureteral calculi)

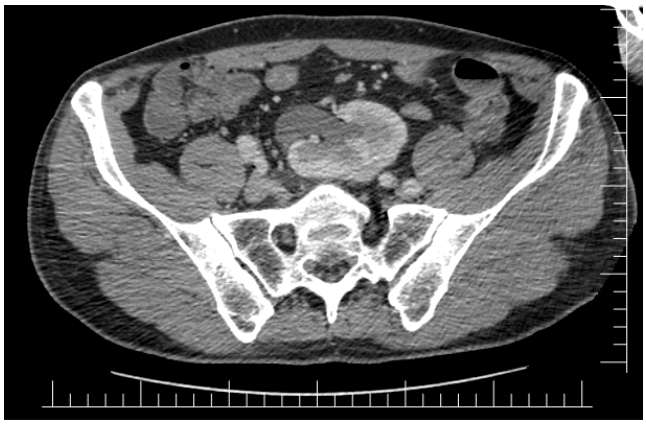

Figure 2 Intravenous contrast-enhanced lower abdominal tomography (Pelvicaliceal dilatation)

Discussion

The kidneys are retro peritoneal organs surrounded by adipose tissue. The yare located between the 12th thoracic and 3th lumbar vertebra. Pelvic ectopia accounts for 1 of each 2500 births[2]. Pelvic kidneys are often asymptomatic and incidentally discovered. Pelvic kidneys are usually small in size and irregular in shape, with varying rotation, extrarenal calices and multiple vascularization. Due to abnormal rotation, shape and vascularization, pelvic kidneys cause complication ssuch as urinarytractinfections (UTI), kidney stones, uretero-pelvic joint obstruction, and vesico ureteral reflux[3].

In our case, a 49-year-old patient did not know that he had a pelvic kidney. He was admitted with abdominal pain with out flank pain. Because of leukocytosis andvomiting, acute appendicitis was considered in the fore ground. The patient was found to have anatomic variations, pelvic kidney and pelvicaly ceal dilatation of this kidney due to a 5 mm stone in the ureter.

Conclusion

Anatomic variations should be kept in mind when approaching abdominal pain patients for examination and imaging methods. In a patient with a pelvic kidney, renal colic pain may be considered only in the lower abdomen and these differences should not be ignored when evaluating the patient.

References

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