Case Report

ภาวะไตขาดเลือด: รายงานผู้ป่วย 1 ราย ที่มีภาวะเลือดคั่งหลังช่องท้องเป็นอาการนำ

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Renal Infarction: Report of a Case Presenting with Spontaneous Retroperitoneal Hematoma.

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Songkla Med J 2013;31(6):297-301

บทคัดย่อ:

ภาวะเลือดคั่งหลังช่องท้องพบได้ไม่บ่อยในเวชปฏิบัติทั่วไป แต่ส่งผลต่อชีวิตผู้ป่วยเมื่อเกิดความล่าช้าในการวินิจฉัย รายงานผู้ป่วยไตขาดเลือดที่มีภาวะเลือดคั่งหลังช่องท้องเป็นอาการนำ ซึ่งเป็นสาเหตุที่พบได้ไม่บ่อย

รายงานผู้ป่วยหญิงไทยคู่ อายุ 42 ปี มีประวัติการใช้ยาเม็ดคุมกำเนิดเป็นเวลานาน มาโรงพยาบาลเรื่องปัสสาวะเป็นเลือด การวินิจฉัยด้วยเอกซเรย์คอมพิวเตอร์พบเลือดคั่งหลังช่องท้อง ผู้ป่วยได้รับการรักษาด้วยการตัดไต และผลการตรวจทางพยาธิวิทยา รายงานภาวะไตขาดเลือด

สรุป: รายงานผู้ป่วยที่มีภาวะไตขาดเลือดซึ่งมีประวัติรับประทานยาคุมกำเนิดร่วมด้วย โดยมีภาวะเลือดคั่งหลังช่องท้องเป็นอาการนำ

คำสำคัญ: ภาวะไตขาดเลือด, ยาคุมกำเนิด, เลือดคั่งหลังช่องท้อง

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Abstract:

Spontaneous retroperitoneal hematoma (SRH) is a rare condition. A delayed diagnosis can result in death. A case of renal infarction, which is an uncommon cause of SRH, is discussed.

Case report: A 42 year-old Thai female with a history of long standing oral contraceptive pill use was admitted with gross hematuria. A computed tomography scan of the kidneys, ureters, and bladder (KUB) system revealed a retroperitoneal hematoma, so nephrectomy was performed and pathological report revealed renal infarction.

Conclusions: We report a case of renal infarction with history of oral contraceptive pill use presenting with retroperitoneal hematoma.

Keywords: renal infarction, retroperitoneal hematoma, oral contraceptive pill

Introduction

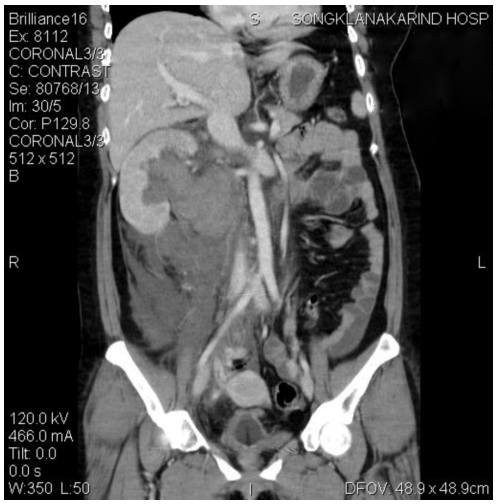
Spontaneous retroperitoneal hematoma (SRH) is an uncommon condition, with fatalities arising from delayed diagnosis. Most of the cases are tumor in origin, with angiomyolipoma predominant followed closely by renal cell carcinoma while vascular disease is the next most common with polyarteritis nodosa occurring most frequently[1]. We report a case of renal infarction presenting with SRH with a long standing history of oral contraceptive pill use.

Case report

A 42 year-old female with history of oral contraceptive pill use for 10 years, presented with history of 3 days of gross hematuria and right flank pain without history of trauma. She had anemia (hematocrit 26.2%) and palpable right upper quadrant abdominal mass. Her blood examination showed normal platelet and coagulogram, normal electrocardiogram (EKG) and normal renal function with an estimated glomerular filtration rate (GFR) of 102 ml/min. An emergency computed tomography (CT) scan of kidneys, ureters, and bladder (KUB) system revealed large retroperitoneal hematoma and the bleeding point at upper pole of right kidney (Figure 1) without deep vein thrombosis. Right nephrectomy was performed, and multiple areas of renal parenchymal infarction were found (Figure 2). The pathologic result of the kidney showed hemorrhagic infarction with extensive perinephric hemorrhage and thrombosis of the medium and large renal vein (Figure 3).

Discussion

Renal infarction is rarely initially suspected due to nonspecific clinical symptoms; flank or abdomianl pain and hematuria[2]. The most common source of renal emboli is the heart, especially in the setting of atrial fibrillation[3], whereas a thromboembolic phenomenon caused by oral contraceptive pill use is uncommon[4]. The investigation for renal infarction is CT KUB, as nephrographic phase images can show these findings, but ideally the



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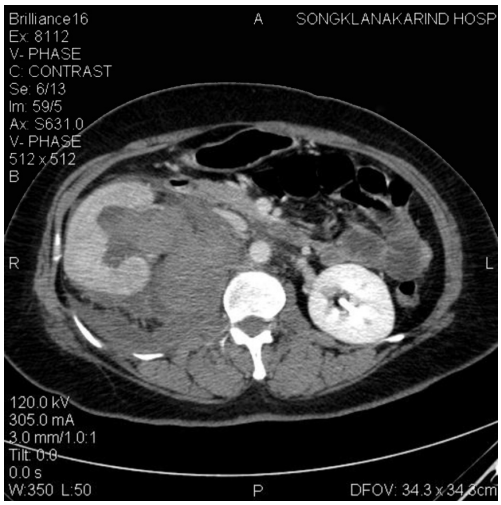

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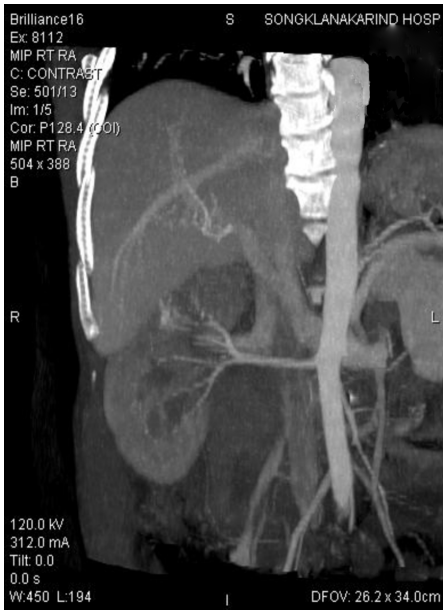
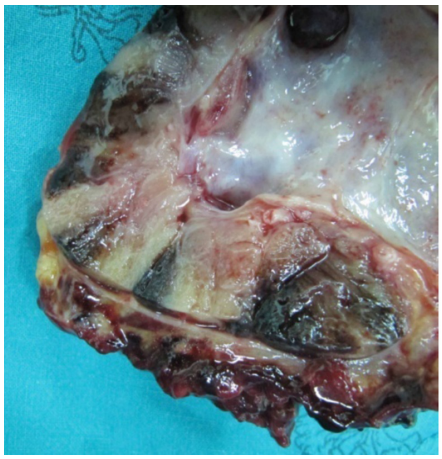


1C

Figure 1 1A CT KUB, coronal view and Figure 1B CT KUB cross-section view showed retroperitoneal hematoma in right posterior pararenal space, 7.7x8.3 cm in size, posterior to the ureteropelvic junction with involvement of right perirenal and pararenal space delayed nephrogram of right kidney, moderate right hydronephrosis, no visible enhancing solid tumor. Figure 1C CT KUB with contrast; the bleeding point in upper pole of right kidney

2A



2B

Figure 2 2A and 2B Gross pathology; the perinephric fat showed extensive hemorrhage, multiple areas of wedge-shaped hemorrhagic infarction throughout the kidney, the pelvis showed mild dilatation without hemorrhage or tumor mass The renal artery was patent but found thrombosis of medium and large renal vein.

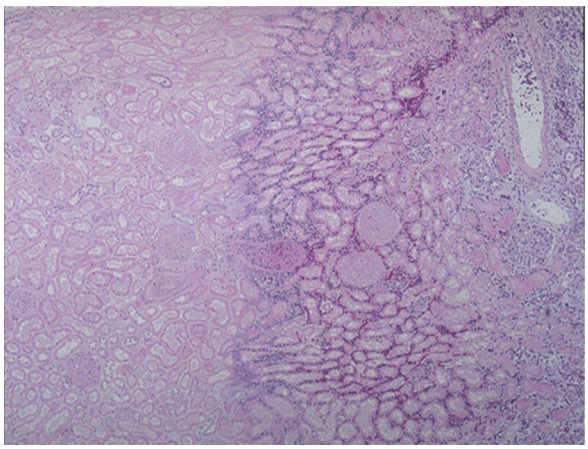


Figure 3 Microscopic appearance of an acute renal infarct. Compare the intact architecture of the normal kidney cortex with the hyperemic kidney that was dying, then the pale pink infarcted kidney in which both tubules and glomeruli were dead. This was acute coagulative necrosis, which initially leaved the pale outlines of the infarcted cells.

images should be performed during the cortico-medullary phase[5]. The contrast enhanced CT findings of wedge shaped peripheral perfusion defects are typical of renal infarcts. These can be described as focal or global, and are considered global if the perfusion defect encompasses more than 50% of the renal cortex[5,6]. The most sensitive serum indicator for renal infarction is an elevation in serum lactate dehydrogenase, which was found to be present in almost 100% of cases in one reported series[1], our patients data did not show the same result, maybe due to the delayed presentation to emergency.

In early presentation of renal infarction, the recommendation for treatment is anticoagulation, with medically managed patients performing better than those undergoing surgery[7,8]. However, the ischemic tolerance of the kidney is estimated at 90 minutes, and there is no role for thrombolytic therapy after this time as it is unlikely to lead to a recovery in renal function[9]. So the treatment of our patient, who had 3 days delayed presentation, the thrombolytic therapy could not be used for treatment. After nephrectomy, the pathological report revealed thrombosis of the medium and large renal vein, which we could identify the origin of the thrombus. The only clue of suggestion was longstanding usage of contraceptive pill, even all negative results of investigation for emboli.

Conclusion

Renal infarction is an uncommon cause of renal hemorrhage. It is important to document that all patient who are diagnosed as renal infarction have to clarify cause and risk factor such as oral contraception use in benefit of prevention of recurrent thromboembolism.

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