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BACKGROUND: Spontaneous formation of Urinoma is a rare condition, especially in pregnancy. Here we report a patient in the third trimester of pregnancy with spontaneous renal rupture who then develops a urinoma from urine leaking into the perinephric space and urinoma infection. Only a handful of case reports have been published on the above topic.

AIM: To highlight the presentation, diagnosis, treatment, and prognosis of urinoma in pregnancy.

CASE: A 34-year-old primigravida with 34 weeks gestation was diagnosed with spontaneous renal rupture when presented with worsening right sided flank pain, fever, rigors with subsequently developing urinary symptoms like dysuria, incomplete voiding, right sided groin pain. Her pregnancy was unremarkable prior to presentation with no history of prior trauma or stones and no documented urinary tract infection. Previous medical & surgical history included brain AV fistula repair four years ago which was followed up yearly with private neurologist and it was stable. Urinalysis yielded normal results initially and the urine culture result was also negative. Urine analysis showed positive leucocytes subsequently on day 4 of presentation. Abdominal ultrasonography revealed right hydronephrosis. Abdominal MRI scan showed spontaneous right sided forniceal rupture with large volume right perinephric fluid - presumed urinoma complicating. She subsequently underwent right nephrostomy tube insertion which relieved her symptoms, and she was discharged home



Figure 1: Ultrasound findings

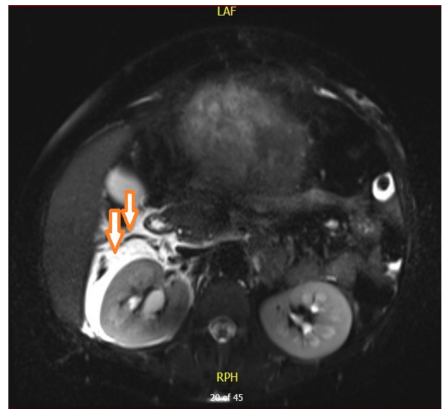


Figure 2: MRI findings

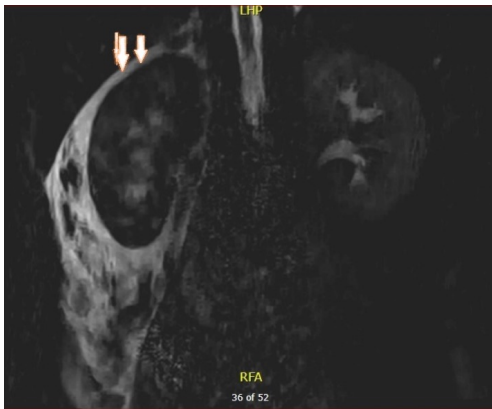


Figure 3: MRI findings

RESULTS: The pregnancy ended with a caesarean section at thirty-five weeks with abnormal CTG. Nephrostomy tube was removed eight days after insertion (3 days post cesarean section) with normal CT intravenous pyelogram. Six weeks later, with the use of ultrasonography, no relapse of perinephric urinoma was concluded. She required no routine urological follow-up.

DISCUSSION: Maternal urinoma is an important differential diagnosis for flank pain during pregnancy. Nephrostomy tube insertion was the main management. Close monitoring of the symptom with serial ultrasonography and MRI may be the key for diagnosis. This finding should prompt a thorough diagnostic evaluation, surveillance, and postnatal follow-up. Overall, the presence of a urinoma is associated with irreversible ipsilateral renal dysfunction in 70% to 80% of cases. Associated anhydramnios portends an extremely poor prognosis, especially if seen in the second trimester of the pregnancy. In conclusion, urinomas should be a consideration for women with postpartum flank pain, and it is necessary to diagnose quickly and treat appropriately in order to preserve renal function.

- REFERENCES:**
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