Rapid enlargement of a giant fibroadenoma in pregnancy: a case report

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BACKGROUND

Rupture of the renal calyceal and urinoma formation is a rare manifestation of obstructive uropathy, typically caused by ureteric calculi or ureteric compression.

CASE REPORT

A 38-year-old lady presented at 40 weeks' gestation for induction of labour due to reduced fetal movements. Her medical and obstetric history included gestational hypertension and one previous caesarean section. At 8cm dilatation, cardiotography showed complicated variable decelerations and haematuria was observed. An emergency section was performed haemoperitoneum was found on entry with a ballooned lower segment, high bladder and haematoma at the left uterine scar. After delivery of a live infant, a left lateral uterine angle extension to the uterine vessels was noted. A CT urogram post-operatively showed a left renal calyceal rupture and small urinoma, with no evidence of an obstructing ureteric injury. lesion or This conservatively managed as the patient was asymptomatic, passing clear urine and had normal renal biochemical tests. Two months postpartum, a repeat CT urogram was done, showing interval resolution of the left perinephric soft tissue changes, with no residual urinoma identified. She remained asymptomatic and no further urological follow up was required.

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DISCUSSION

Urinomas develop from backflow of urine, rising intrapelvic pressures, with subsequent ruptures or increased porosity at the calyceal fornices, causing extravasation of urine through sinuses and renal capsules.^{1,2} They mainly result from trauma to the urogenital system during surgery, and obstructive causes including pelvic masses, stone posterior urethral valves, ureteropelvic iunction obstruction, and congenital anomalies.3 The exact cause of the patient's calyceal rupture is unclear, though could be secondary to ureteric compression causing increased pressure during her caesarean section, or a passed ureteric stone.

During pregnancy, hydronephrosis is a common occurrence (up to 90%) due to hormonal changes and mechanical obstruction by a gravid uterus, but completely resolves postpartum.4 However, spontaneous rupture of the renal fornix and urinoma formation is extremely rare in pregnancy and the postpartum period.⁵ In most cases, small urinomas will reabsorb spontaneously, though larger urinomas may require nephrostomy catheters and percutaneous drainage to avoid perinephric serious complications (e.g. abscess, urinary granuloma, sepsis).6

