Large hemorrhagic ovarian cyst in postmenopausal patient with autosomal dominant polycystic kidney disease

Sir,

Autosomal dominant polycystic kidney disease (ADPKD) is an important kidney disease. Although no association is found between ADPKD and multicystic ovaries, but single ovarian cysts can occur.^[1] A fifty-seven years postmenopausal woman with ADPKD on dialysis was referred with complaints of lower abdominal pain for 10 days. She had undergone hemodialysis twice before admission. There were no complaints of abdominal distension or vomiting. Her obstetric history was uneventful with the last delivery being 30 years back. There was no other surgical history apart from tubal ligation. On examination, a mass around 22 weeks gravid uterus size was felt, which was firm in consistency. Cervix and vagina were healthy on visual inspection. On vaginal examination, cervix and uterus were normal and felt posteriorly, separate from the mass. Transvaginal sonography suggested 12 cm \times 12 cm right adnexal mass containing echogenic fluid with absent color flow on Doppler [Figure 1], with normal sized uterus. Her hemoglobin was 8 g/dl, total counts and platelets were normal. Her serum creatinine was 7.22 mg/dl, blood urea 140 mg/dl, sodium 133.9 mEq/L, and potassium 5.52 mEq/L. All ovarian tumor markers (lactate dehydrogenase, cancer antigen (CA-125), CA-19.9, and α -fetoprotein) were normal.

Laparoscopically, the ovarian cyst was removed and was sent for frozen section which suggested hemorrhagic cyst, following which we did a total laparascopic hysterectomy with bilateral salpingo-oophorectomy. The patient recovered well and is on regular follow-up in nephrology unit. Her histopathological examination report revealed epithelial hemorrhagic cyst.

The presence of a large hemorrhagic ovarian cyst in postmenopausal ADPKD patient is unusual. No similar case has been reported in the literature so far. The major concern in such cases is the risk of ovarian cancer. In postmenopausal women, about 30% of adnexal masses

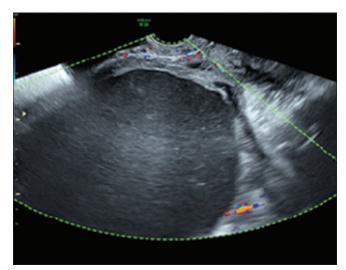


Figure 1: 12 cm \times 12 cm right adnexal mass containing echogenic fluid with absent color flow on Doppler

are malignant.^[2] The large ovarian cyst can undergo torsion at any time leading to acute abdominal pain and necrosis of the ovary. Patients are also at risk of developing sepsis due to torsion. Massive ovarian cyst hemorrhage can occur in anticoagulated patients, including those on hemodialysis, who receive heparin anticoagulation.^[3] Such cyst may rupture accidentally during continuous ambulatory peritoneal dialysis leading to intraperitoneal hemorrhage, which can be confused with bleeding caused by placement of percutaneous intra-abdominal catheter as a result of direct vascular or visceral damage.^[4] Hence, patients who are on chronic intermittent hemodialysis should have regular gynecology check up to rule out any ovarian cyst and should be managed accordingly.

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