NJOG 2008 Nov-Dec; 3 (2): 54 - 56

# Acute presentation of ruptured ovarian cyst secondary to torsion with ipsislateral concomitant ectopic pregnancy: A case report

Mahendra R Pandey, Neeva Ojha
*TUTH, Kathmandu, Nepal*

**Abstract**

Twenty-one year unmarried regularly menstruating lady without history of amenorrhea presented with acute abdomen in TU Teaching Hospital –Emergency Department. On evaluation urine pregnancy test was positive. Urgent ultrasound revealed multiloculated cystic lesion measuring 8.5 x 8 x 6.7 cms in the right adnexa anterolateral to the uterus with no intrauterine gestational sac. She underwent emergency laparotomy with right salpingo-oophorectomy. On laparotomy there was twisted and ruptured right ovarian cyst with unruptured ampullary pregnancy on the same side. There was coexistence of these two conditions which presented as acute abdomen.

**Keywords**: Acute abdomen, twisted ovarian cyst, unruptured right ampullary pregnancy.

## Introduction

It is a common scene in the emergency to see patients in agony due to acute abdominal pain. Abdomen sometimes being referred to as a Pandora's Box, one has to keep many conditions in mind to arrive at a correct diagnosis to provide appropriate treatment. Here is an interesting case of ruptured twisted ovarian cyst with ectopic pregnancy on the same side, which presented with acute abdomen and was managed appropriately.

## Case

A 21 years unmarried female with regular menstrual cycles presented to TUTH- Emergency Department with complaints of sudden onset of right-sided lower abdominal pain for two days and one episode of vomiting on the day of presentation. On repeated questioning she gave history of sexual contact. However, there was no history of overdue of menstrual period. There was no history of bleeding per vaginum, dizziness or fainting attack. Patient was administered antispasmodic and analgesic which relieved her pain. On examination, her general condition was fair. She was tachycardic with pulse rate of 120/min, and blood pressure was 130/80 mmHg. Abdominal examination revealed no distension, guarding or rigidity. However, there was a soft cystic mass that was just palpable in the suprapubic area. It was non-tender and mobile from side to side.

On per speculum examination cervix was healthy with no bleeding or discharge. Internal examination showed no cervical motion tenderness. Uterine size could not be assessed properly and there was a mass of size 8 x 7 cm. felt in anterior side of right fornix. The mass was soft, cystic, mobile, and non-tender. The left fornix was free.

With the impression of twisted ovarian cyst work up was done. Her hemoglobin was 13gm%, WBC 11,000/cmm (N-78%, L-18%, E-4%). Routine urine examination and renal function tests were within normal limits. Urgent ultrasonogram of abdomen and pelvis revealed multiloculated cystic lesion measuring 8.5 x 8 x 6.7 cm. in the right adnexa anterolateral to the uterus. There was septum measuring 2 mm in thickness with no solid component. Uterus and left ovary were normal. No free fluid was seen in the peritoneal cavity and the Pouch of Douglas. This finding was confirmed by transvaginal sonogram. To our surprise urine B-hCG was positive.

Correspondence
*Neeva Ojha, Asst Lecturer, Ob/Gyn Dept, TUTH*
*Ojhasp@yahoomail.com*

Patient underwent laparotomy under general anesthesia the same evening. Abdomen was opened by midline infraumbilical incision. There was haemoperitoneum of around 100 ml. There was 8 x 8 cm. right ovarian cyst twisted once in its pedicle with a rent of 2 cm over the anterior surface of ovary with blood oozing from it (fig 1 and 2). There was also an unruptured bluish bulge around 2 x 1 cm. in the ampullary region of the right fallopian tube containing blood clot. She underwent right salpingo-oophorectomy. Cut section of the ovarian cyst showed three loculi with thick septa. The cyst contained about 100ml of straw colored fluid. The specimen was sent for histopathological examination.

The patient had uneventful post operative period and was discharged on the 3rd post operative day. Patient came for follow up on the 6th post operative day and the sutures were removed. Histopathology report revealed ruptured follicular cyst with ectopic pregnancy of the right tube.

## Comment

Everyday we come across many cases of acute abdomen either in the outpatient or emergency department. Some of them are amenable to medical management while others require surgical treatment. Patients of ectopic pregnancy or ruptured ovarian cyst may deteriorate rapidly landing in shock needing resuscitation and emergency laparotomy simultaneously. There was no doubt that our case needed laparotomy but the only dilemma was the presence of two pathological conditions simultaneously -the twisted ovarian cyst and the ectopic pregnancy. Patient being labelled as a surgical case of acute abdomen was operated on time and underwent appropriate surgery.

We have been seeing isolated cases of both ruptured and unruptured ectopic pregnancy, twisted and/ or ruptured ovarian cyst; ours was unique case as this was a patient who had twisted ruptured ovarian cyst with unruptured tubal ectopic pregnancy.

Cases of surgical emergencies of the uterine adnexae during pregnancy have been reported. Johnson et al (1986) has reported seven cases of surgical disease of the adnexae during pregnancy between 1776 to 1980.[1] There were three cases due to adnexal torsion, two ruptured hemorrhagic ovarian cysts, one heterotropic pregnancy and one ruptured endometrioma. Abdominal pain was the main presenting symptom in those patients and right side being mostly affected. Our patient had presented with right sided pain abdomen, vomiting, and tachycardia which were matching with the reported cases.

Bernabei et al from Italy has reported a case with simultaneous presence of an ovarian and a normal intrauterine pregnancy. It was a rare case seen as an ovarian cyst during pregnancy. It was immediately and successfully treated.[2]

Twisted dermoid cyst with concurrent ectopic pregnancy has also been reported. [3]

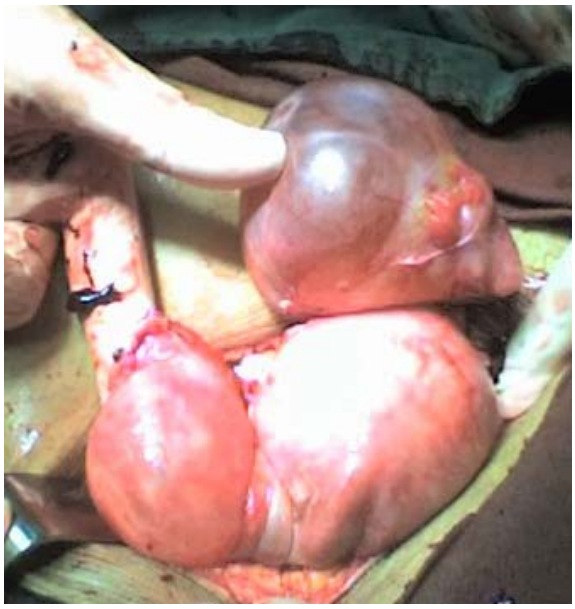

*fig1. Ectopic pregnancy with ovarian cyst*

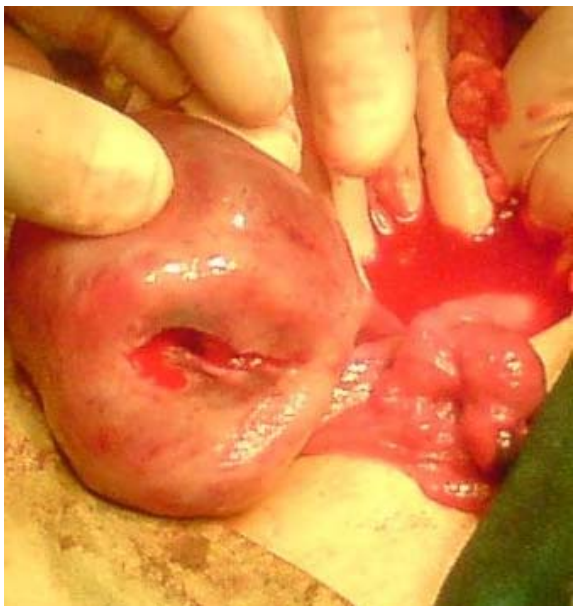

*fig2. Rupture of ovarian cyst*

Pratt-Thomas reported a rare case of unilateral gonadoblastoma associated with a ruptured ectopic tubal pregnancy.[4] The surgical specimens, in addition to the ruptured tubal pregnancy, showed nodular foci of typical gonadoblastoma in the right ovary, the remainder of the ovarian tissue being normal.

## Conclusion

Though rare, one should keep the mind open about the coexistence of two pathologies when dealing with females presenting with acute abdomen. If prompt surgical intervention is undertaken when the clinical picture suggests, a satisfactory outcome can be expected.

## References

1. Johnson TR Jr, Woodruff JD. Surgical emergencies of the uterine adnexae during pregnancy. Int J Gynaecol Obstet. 1986; 24(5):331-5.
2. Bernabei A, Morgante G, Mazzini M, Guerrini E, Fava A, Danero S. Simultaneous ovarian and intrauterine pregnancy: case report. Am J Obstet Gynecol. 1992;167(1):134-5.
3. Turner RJ, Day PL. Torsed infected dermoid cyst with concurrent ectopic pregnancy. Normal physiologic continuation of the gestation. Mil Med. 1986;151(3):179-180.
4. Pratt-Thomas HR, Cooper JM. Gonadoblastoma with tubal pregnancy. Am J Clin Pathol 1976; 65(1):121-5.