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Case Report

The pain is not from the uterus: a rare complication of ovarian cyst during term labour

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ABSTRACT

A case of primigravida with an ovarian torsion at 39 weeks of gestation is reported here. A Malay lady in her late 20s with a known case of ovarian cyst complained of sudden onset of severe pain during labour. Diagnosis of ovarian torsion was made and she underwent laparotomy cystectomy with emergency lower segment caesarean section in the same setting. Post-operative recovery was unremarkable. Histopathological examination confirmed mucinous cystadenoma.

Keywords: Ovarian cyst torsion, Cyst in pregnancy, Mucinous cystadenoma, Acute abdomen, Obstetrics emergency

INTRODUCTION

Ovarian cysts are common in women of reproductive age, with most being asymptomatic and managed conservatively. Ovarian cyst is a predisposing factor for ovarian torsion, which is a rare obstetric emergency that can occur during pregnancy and even during labour. According to a prospective study involving 3000 pregnant women, the incidence of ovarian torsion in pregnancy is about 3%. In contrast, another study quoted a range of 0.8-6.8% with the most common types being dermoid and cystadenoma.[1,2] This can be challenging for clinicians, especially obstetricians to co-manage along with pregnancy since the symptoms and clinical signs are mostly nonspecific; such as abdominal or pelvic pain, nausea and/or vomiting, peritoneal irritation, and leucocytosis which are common in pregnancy and during labour.[3,5]

This was a case report of a primigravida in her late 20s who presented in labour with acute abdominal pain and was diagnosed with a twisted ovarian cyst after excluding other life-threatening conditions for mother and baby. The patient underwent emergency laparotomy, cystectomy, and caesarean section in the same setting. Ovarian torsion occurring in the setting of term pregnancy is a rare entity with limited case reports in the literature. To the best of the author's knowledge, this was the first reported case of a twisted ovarian cyst during labour.

CASE REPORT

A primigravida in her late 20s with a known case of left ovarian cyst, which was initially diagnosed as endometrioma due to her symptoms of severe dysmenorrhea. She was under our general gynaecology clinic follow-up for the past 2 years where she initially presented with a complaint of severe dysmenorrhea which has been affecting her quality of life. We found a uninoculated left ovarian cyst of size 5×5 centimetres with a thick capsule; however, she refused any intervention (Figure 1). Her tumour markers were normal. Her dysmenorrhea was controlled with oral celecoxib 200 mg OD (Celebrex, Pfizer). Later on, she was started on oral dienogest 2 mg OD (Visanne, Bayer) which resolved her symptoms completely.

2 years later, she got pregnant. She was seen at 16 weeks of pregnancy; cyst size was noted to be similar. A decision was made for conservative management in view of the possible benign nature of the cyst and she was regularly monitored throughout the pregnancy and was asymptomatic (Figure 2).

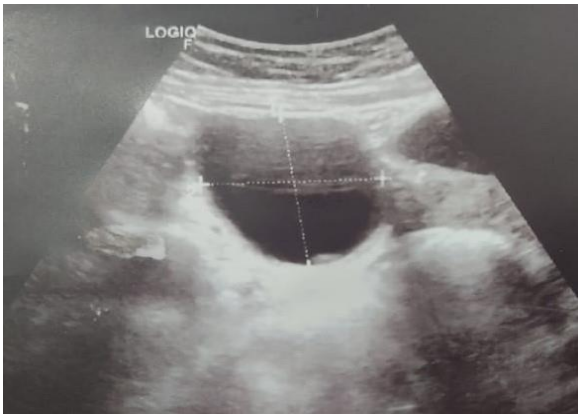

Figure 1: Transabdominal scan image of left ovarian cyst seen at 8 weeks of pregnancy measuring 5.4×5.4 centimetres.

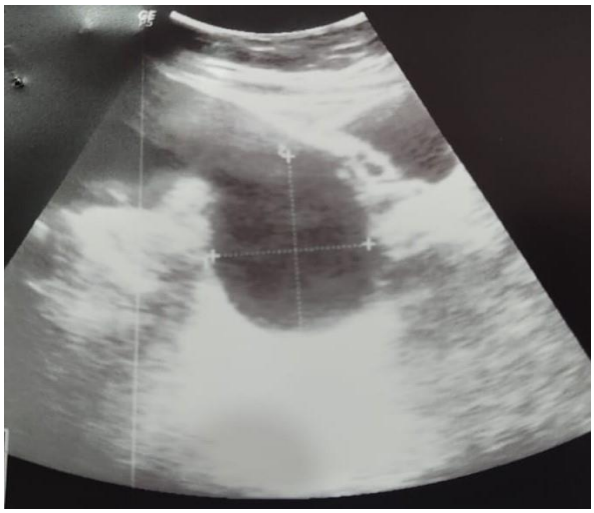

Figure 2: Transabdominal scan image of the same left ovarian cyst seen at 29 weeks of pregnancy, measuring 4.5×6.0 centimetres.

At 39 weeks of pregnancy, she was admitted for delivery. She had mild regular contractions for 2 days in the ward. On the third day of admission, she complained of sudden onset of left iliac fossa pain, radiating to the back with a pain score of 10.

A general examination was done, and the abdomen was not tense; however, was tender at the left iliac fossa with localized guarding. Bilateral renal punch was negative. Vaginal examination revealed a 2 centimetres os opening. A transabdominal scan at that time showed a left ovarian cyst 4×8 cm uniloculated simple cyst without any free fluid seen. Her cardiotocograph was normal.

Her pain persisted and became more intense despite analgesic and was initially thought to be placental abruption however, the membrane was ruptured and revealed clear liquor. Ovarian torsion was suspected thus she underwent laparotomy cystectomy with emergency lower segment caesarean section in the same setting. Intraoperatively we found a left ovarian cyst measuring 5×6 cm, twisted twice at the pedicle. Cystectomy was done with an intact capsule. She delivered a healthy 3.1 kilogram baby boy. She recovered well post-operation and was discharged after 2 days. Histopathology of the left cyst wall confirmed mucinous cystadenoma.

DISCUSSION

Managing ovarian tumours in pregnancy can be difficult, especially when it was first detected during pregnancy, but the patient was a known case of ovarian cyst before pregnancy. Adnexal masses with a size of 6 to 8 cm have a higher risk of torsion and usually occur between the 10th to 17th weeks of gestation; however, after the 20th week of gestation, the incidence of ovarian torsion declined below 5.9%.[4] Since the cyst was most likely benign and the size was static, it was managed conservatively with serial ultrasound surveillance during the antenatal period.

The exact aetiology of ovarian torsion in pregnancy is not well understood, but it is believed to be related to the increased size of the uterus, which can cause the adnexa to move abnormally and twist on its vascular pedicle due to laxity of the supporting ligaments during pregnancy.[3] The presenting symptoms can be similar to those of other common gravid complications such as appendicitis, cholecystitis, or even obstetrics complications; like in this case where placental abruption was initially suspected. This makes it important to consider ovarian torsion in the differential diagnosis of severe abdominal pain in pregnant women.

Diagnosing ovarian torsion during labour can be challenging despite various imaging modalities available due to their acute presentation and the gravid uterus. Ultrasound is the diagnostic modality of choice in ovarian torsion. It can identify the increased size of the cyst as in our case and pick up the presence of free fluid in the abdominal cavity.[5] In some cases, if the condition permits, magnetic resonance imaging (MRI) or computed tomography (CT) can be done for better visualization of the pelvic structures.

The treatment of ovarian torsion involves surgical intervention to untwist the ovary and preserve ovarian function and, in this patient, we also proceed with an emergency caesarean section. We managed to preserve the ovary, which is still viable due to the acute setting and fast intervention.

This case highlights the importance of considering ovarian cysts in the differential diagnosis of acute abdominal pain during labour and the required prompt management.

CONCLUSION

In conclusion, ovarian torsion is a rare but serious complication of ovarian cysts that can occur during pregnancy event in the setting of term labour. Early detection and prompt intervention are necessary to prevent potential complications. Healthcare professionals should be aware of the possibility of ovarian torsion in pregnancy in patients with a known case of ovarian cyst with unusual pain during labour.

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