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Research Paper

An Unusual Case of Intestinal Obstruction Due to Ovarian Cyst in a 7 Week Pregnancy- A Case Report

Medical Science

KEYWORDS : Twisted ovarian cyst, intestinal obstruction, early pregnancy.

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ABSTRACT

A 26 year old gravida 2 para 1 with a known ovarian cyst presented with a history of intestinal obstruction which failed to settle with conservative measures. Patient was taken for laparotomy, the twisted left ovarian cyst was identified which was found to be adherent to the sigmoid colon, was separated carefully and removed. Right ovarian cyst was found normal. Intestinal obstruction by ovarian cysts in early pregnancy is extremely rare but should be considered as a possible cause in those patients with known cysts presenting with obstruction.

INTRODUCTION

Ovarian cysts in pregnancy are reported to occur once in every 1000 pregnancies[1]. The etiology of ovarian tumors usually depends on patient's age and therefore benign masses such as functional ovarian cysts, benign cystic teratomas and serous cyst adenomas are more commonly seen in pregnancy[2,3].Ovarian cysts appearing during the first trimester usually regress in size by second trimester and are thus managed conservatively. Laparoscopic ovarian cystectomy performed in the second trimester has been described in the literature but this is the case where a large twisted ovarian cyst causing intestinal obstruction in the first trimester was managed by laparotomy.

CASE REPORT

A 26 years old gravida 2 para 1 at 7 weeks of gestation was referred from the local health center with a complaint of abdominal distension followed by mild generalized abdominal pain which had developed over 15 days but exaggerated in the last 5 days. Distension was followed by mild generalized abdominal pain which was colicky in nature and was associated with nausea, occasional vomiting and breathlessness on lying flat. She gave no history of liver or renal diseases. It was planned pregnancy and she denied any infertility problem or use of contraceptives before pregnancy. Her gynecologic, past medical and family history were unremarkable. When she was first seen in. Emergency Department she looked like a pregnant lady at full term, average built, well oriented to time and place and in acute distress. Her general condition and vitals were normal. Abdominal examination revealed generalized abdominal distension with a flat umbilicus, mild tenderness and a positive fluid thrill. An immediate ultrasound of the abdomen excluded ascites and showed a huge abdominal cystic mass spanning most of the abdomen and pelvis(Fig1). Due to the huge size of the cyst, its origin could not be well defined. However, there was no evidence of any solid element or septations in the cyst. Liver, spleen and kidneys were normal and pancreas was not seen. Overall morphological picture did not indicate malignancy. A subsequent trans-abdominal ultrasound confirmed an intrauterine gestational sac of 7 weeks with a live fetus. Her laboratory results showed moderate iron deficiency anemia with normal hepatic, renal and coagulation profiles. Tumour marker for ovarian malignancy ie. CA 125 was raised (131.47 U/ml). To locate the origin of the cyst, CT scan, which is relatively contraindicated in early pregnancy, was done(Fig2). In view of the large size and undetermined origin of the cyst even in CECT abdomen, the surgical option to remove the cyst by a laparotomy was discussed with the patient, which she agreed to. Patient was counselled regarding the possible need for salpingo-oopherectomy in case the intra-operative findings were suspicious of malignancy and the about the risk of miscarriage or preterm labor following surgery. She was operated by a team of general surgeons.The patient had an uncomplicated postoperative recovery. Two month, after the operations an ultrasound was performed showing normal intrauterine Pregnancy.

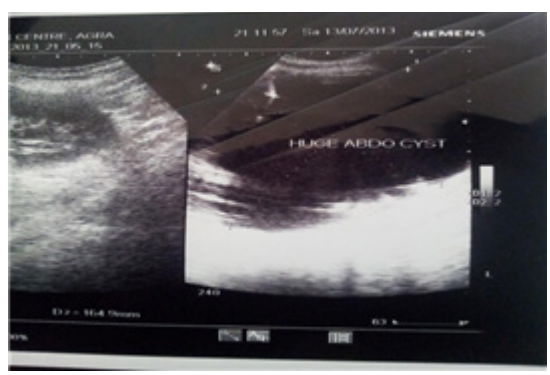


Fig.1

USG-ABDOMEN SHOWING HUGE OVARIAN CYST

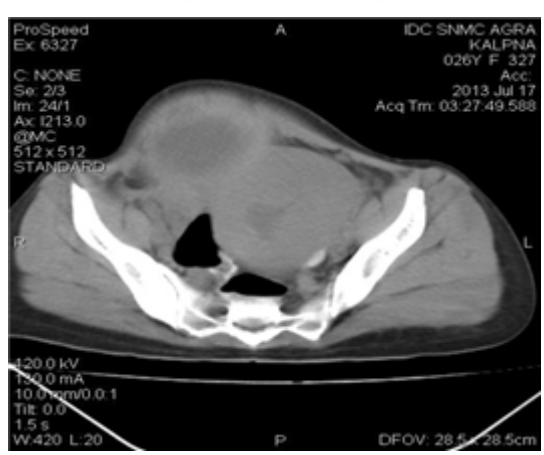


Fig.2

CECT ABDOMEN-SHOWING HUGE OVARIAN CYST WITH GRAVID UTERUS

PATHOLOGY

Macroscopic examination of the cyst revealed the smooth surface and red in colour showing few haemorrhagic spots(fig.3).

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On cutting red clear watery fluid came out. Inner surface shows multiple, incomplete septa.Few thickened areas which on cut shows red haemorrhagic blood. Microscopic findings of ovary showed features of benign haemorrhagic cyst.

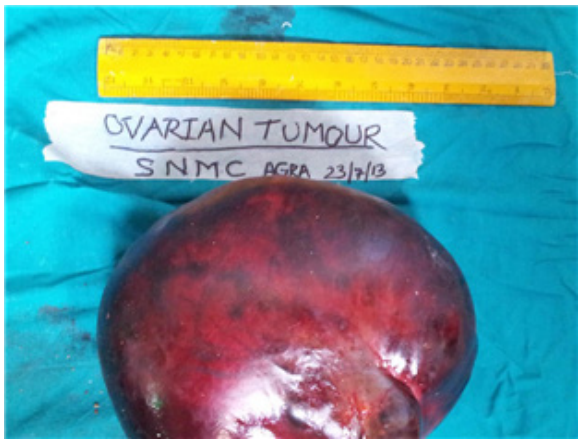


Fig.3
SPECIMEN OF OVARIAN CYST

DISCUSSION

In the reproductive age ovarian tumors are mainly unilateral benign cysts.[4] About 70% of all serous cyst-adenomas are benign tumors, 5–10% have borderline malignant potential and 20–25% are malignant. They often tend to be multilocular with papillary growths extending from both internal and external surface of the tumor but unilocular tumors which are lined by a single layer of cuboidal epithelium are not uncommon.Surgical intervention during pregnancy is indicated for large and/or symptomatic tumors and those that appear highly suspicious for malignancy on imaging or laboratory tests. The extent of surgical intervention depends on the intra operative diagnosis of a benign versus a malignant tumor. Conservative surgery is appropriate for benign masses and borderline ovarian tumors particularly in women of reproductive age[2,3]. Laparoscopic cystectomy in pregnancy was first reported in 1991 by Nezhat et al. In 2007, Johnson et al reported a successful removal of a 6198g ovarian serous cyst-adenoma by use of minimally invasive techniques.[4,5,6]. Furthermore, in 2007, Tica et al(2007) reported conservative management of an 11cm sized serous cyst at 6th week of gestation with subsequent laparotomy and cystectomy at 16th week of gestation due to torsion[7]. Dolly Jaykant Dhuliya et all(2011) reported large serous cyst-adenoma (30x40cm and wt 7.5kg) in the first Trimester which was treated Laparoscopically[8]. Similarly, we managed to remove the ovarian cyst weighing 4500g successfully by laparotomy in early pregnancy. According to previous recommendations, most surgical options for adnexal masses in pregnancy are managed ideally in the second trimester after organogenesis is complete, decreasing the risk of fetal loss or spontaneous miscarriage and allowing for possible spontaneous regression of the mass[9,10]. Therefore, owing to the huge size of the cyst, its undetermined origin and patient having one of the pressure symptoms, we had to surgically intervene early in the pregnancy. In 2 months of followup period patient had normal pregnancy.

CONCLUSION

We would like to emphasize our successful management of such a huge cyst measuring well over 25x17 cm at 7th week of gestation with no complications. We believe that this is the first reported case of a cyst weighing 4.5kg at 7 weeks of gestation managed by laparotomy in our hospital.

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