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Huge Bilateral Ovarian Cysts in Pregnacy; Rare Findings at Mbagala Rangi Tatu District Hospital-Tanzania

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Abstract

Complications of ovarian cyst in pregnancy are rare. We report a case of peritonitis secondary to rup- tured huge bilateral ovarian cysts which was managed successfully with surgery. We report this case be- cause it has never been published in Tanzania before.

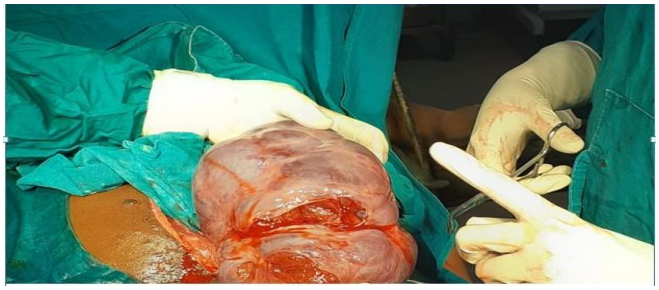
Introduction

Ovarian cysts occur in 3% of pregnancies. Usually, they do not have clinical symptoms and are found accidentally during the ultrasound screening performed in the 1st trimester of pregnancy(1,2). Most ovarian cysts in early pregnancy are physiological and resolve spontaneously, but some persist(1). Ovarian cysts persisting after the first trimester or found during the second trimester are generally excised to prevent torsion or rupture during pregnancy or possible obstruction during labour, and to exclude malignancy(3). Here is the case of pregnant underwent emergency laparatomy due to sign of acute abdomen secondary to ruptured of a huge bilateral ovarian cysts.

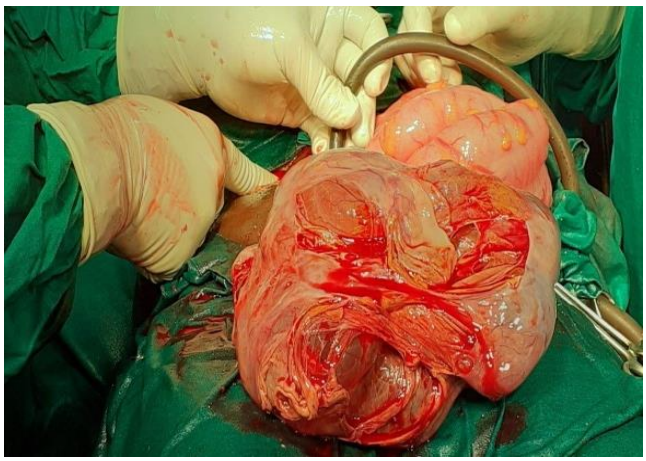
Case Report

25 years old lady presented at our antenatal clinic with amenorrhea of 19wks, was G3P2L1 with one previous scar. In her obstetric history she delivered first pregnancy in 2012, was premature weighed 1.2kg, but the baby died at the age of one year the cause was not explained clearly. The second pregnancy was 2016 delivered 2.8kg full term baby by caesarian section due to fetal distress and the baby is alive. Her main complain in this pregnancy was abdominal fullness. The obstetric ultrasound was done and it showed a normal intrauterine pregnancy at 18 weeks, with huge bilaterally septated ovarian cysts approximately 13.2cmx9.5cm each one of them. The patient was counseled to do MRI at a near by facility. This investigation was not done

immediately because patient could not afford. Five days later the patient developed severe generalized abdominal pain. On examination was stable but in severe pain, bp-108/67mmgh, pr-90b/min. Respiratory she was slightly dyspnic with respiratory rate of 28b/min, and other findings were normal. Cardiovascular system was essentially normal. Per abdominal enlarged bilaterally below the diaphragm, had generalized abdominal tenderness, muscle guarding and rebound tenderness hence it was difficult to palpate the size of uterus. Speculum examination revealed normal vulva as well as cervix, and there was no abnormal vaginal discharge. . Blood was taken for full blood picture and result revealed, RBC-4.02 106/UL, HB-10g/dl, HCT-31.7L%, MCV-77.9L fL, MCH-22.8Lpg, MCHC-25.8g/dl and platelet 301 103/UL. Once again, emergency Obstetric ultrasound was ordered and showed free fluid in peritoneal cavity. Diagnosis of acute abdomen secondary to ruptured ovarian cyst was made. The patient was prepared for emergency laparatomy. Preoperatively management was done including signing of consent form. Intra operative findings revealed gravid uterus approximately 20 weeks of gestational age, all fallopian tubes were normal, huge bilateral septated ovarian cyst ap- proximately 15.4cmx12.7cm on the left(picture 1&2 below) and 14.6cmx13.5 on the right, all these cysts extended up to diaphragm and were filled with yellowish clearly fluid, both cysts had rup- tured hence there was significant turbid fluid in the peritoneal cavity.

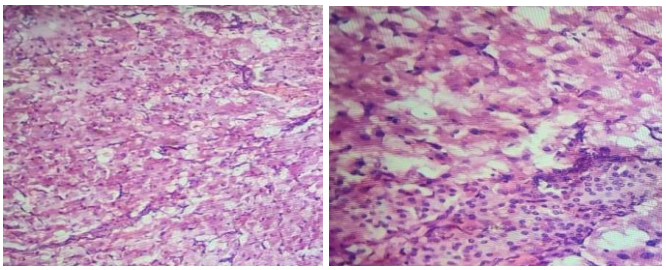


Ruptured left ovarian cyst

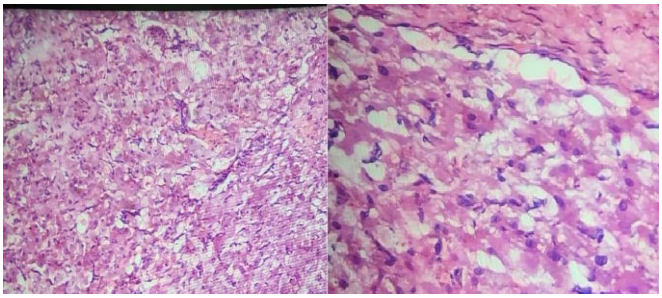


Ruptured right ovarian cyst

Bilaterally ovarian cystectomy was done, some amount of ovarian tissues were preserved on both sides. Postoperative course was uneventfully and she was discharged home after 72hrs with dihydrogestrone tabs 40mg bd for 2 weeks, ibuprofen, metronidazole,erythromycin for 5/7 days, ferrous sulphate 200mg tds for 1/12. Unfortunately on tenth day post laparatomy the patient had incomplete abortion, evacuation was done successfully.



Histology of right ovary



Histology of left ovary

Fig: 3&4 Histology of ovarian tissues showed cystic lining composed of inner layer of lutenized granulosa cells and outer layer of theca cells. Granulosa

cells are polyglonal in shape with abundant eosinophilic cytoplasm and central rounds nucleoli. The outer theca cells are smaller in size.

Following evacuation the serial B-hCG was done in oder to rule out molar pregnancy, as appearance of the cyst looked like theca lutein cyst of gestational trophoblastic diseases (molar pregnancy). The first B-hCG reading was done 11 days after evacuation and the result was 92.5mIU/m whereas second reading 7days later was 3.798mIU/ml. She was successfully discharged from antenatal clinic on 42nd day. After one year she had another pregnancy of which had no complain and managed to deliver a full term baby by cesarean section.

Discussion

Due to the wide spread of ultrasonography(US) technology, adnexal masses incidence is increasing over the years, diagnosed as random finding during scheduled pregnancy check-up(3–5).

Majority of cases present with no symptoms but if the cyst is twisted or ruptured then patient present with symptoms of acute abdomen(1,6). In the index case the patient presented with abdominal fullness initially. Five days later she was admitted at causality with acute abdominal pain and features of peritonitis on physical examination. Ruptured ovarian cyst was confirmed by ultrasound.

The decision whether a cyst in pregnancy will be managed conservatively or surgically depends on the sonographic features, the size of the cyst and symptoms of the patients if patient present with symptoms of acute abdomen emergency laparatomy or laparascopic surgery must be done(1,5,7,10). In the index case the patient underwent emergency laparatomy due to symptoms and signs of acute abdomen secondary to ruptured ovarian cysts(Fig 1&2).

Ovarian masses associated with pregnancy presents as either unilateral or bilateral benign functional cysts like the corpus luteum of pregnancy, folicular and theca-lutein cyst(6,7,8,9). In the present case the patient had huge bilateral follicular ovarian cysts(Fig 3&4). Leiserowitz and other colleque reported the same findings. In addition to that most ovarian mass during pregnancy are functional cyst and resolve after 14-18 weeks, but if it persist after 16 weeks, the mass is predomintaly non fuctional (Chiang and Levine, 2004; Leiserowitz, 2006; Glanc et al., 2008; Hoffman, 2014).The index case had bilateral follicular ovarian cyst at 19 weeks of pregnancy, probably it can be non functional ovarian cyst.

Furthermore these enlargements may mimic molar pregnancy of ovarian tissue during pregnancy might be due to the reaction with elevated serum hCG levels and sometimes normal serum levels and is characterized by an exaggerated ovarian response to this hormone(8,9). As the appearance of ovarian cysts of the current case resembles of that of molar pregnancy the serial serum hcg was done indorder to exclude presence of this difficult condition.

Conclusion

Ovarian cyst during pregnancy is common findings and majority can be treated conservatively, if the patient present with sign and symptoms of acute abdomen then laparatomy is treatment of choice. Care must be taken during resection of ovarian tissues in order to preserve ovaries for further fertility in women of reproductive age. Total ovarian cystectomy can be done if at all the ovarian tissues have features suspected of malignancy or the wom-

en have completed her reproductive carrier.

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