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Case Report: Huge Bilateral Ovarian Cysts in Pregnancy; A 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 ruptured huge bilateral ovarian cysts, which was managed successfully with surgery. We report this case because it has never been published in Tanzania before.

Keywords

Rukia Msumi, Huge bilateral ovarian cyst, Ovarian cyst in pregnancy.

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 labor, and to exclude malignancy [3]. Here is the case of pregnant woman who underwent emergency laparotomy due to acute abdomen secondary to ruptured huge bilateral ovarian cysts.

Case Report

25 years old pregnant woman 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 the index pregnancy was abdominal fullness for 2 weeks. Physical examination revealed distended non tender abdomen. The obstetric ultrasound was done and it showed a normal intrauterine pregnancy at 18 weeks, with huge bilaterally septate ovarian cysts approximately 13.2cm x 9.5cm on left side each and 12.3cm x9.1cm on the right side. The patient was counseled to do MRI at a nearby facility. This investigation was not done immediately because patient could not afford. Five days later, the patient presented at our facility with severe generalized abdominal pain. On examination was alert, slightly dyspneic, bp-108/67mmgh, pr-90b/min and respiratory rate of 28b/min. Per abdomen she had asymmetrical generalized abdominal distension, generalized tenderness, muscle guarding and rebound tenderness. Systemic examination was uneventiful. 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 abdomino-pelvic ultrasound was done and showed free fluid in peritoneal cavity. Diagnosis of acute abdomen secondary to ruptured ovarian cyst was made. The patient was prepared for emergency laparotomy. Intra operative findings revealed gravid uterus approximately 20 weeks of gestational age, ,raptured bilateral septate ovarian cyst approximately 15.4cm x 12.7cm on the left (Figures 1,2 below) and 14.6cm x 13.5cm were found , all fallopian tubes were normal.

Bilaterally ovarian cystectomy was done, some amount of ovarian tissues were preserved on both side. Postoperative course was uneventfully and she was discharged home after 72hrs.

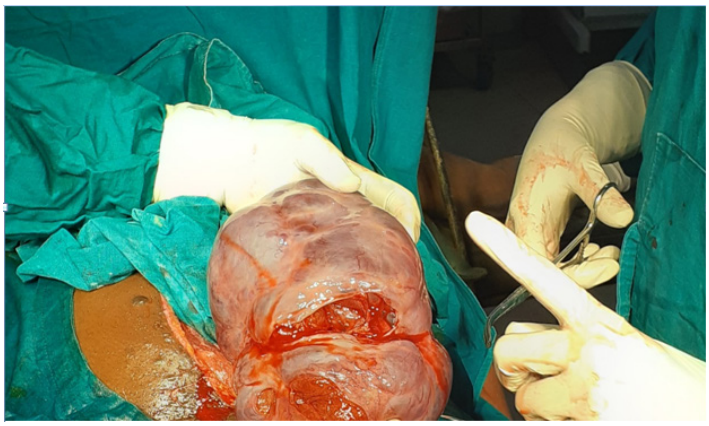


Figure 1: Ruptured left ovarian cyst.

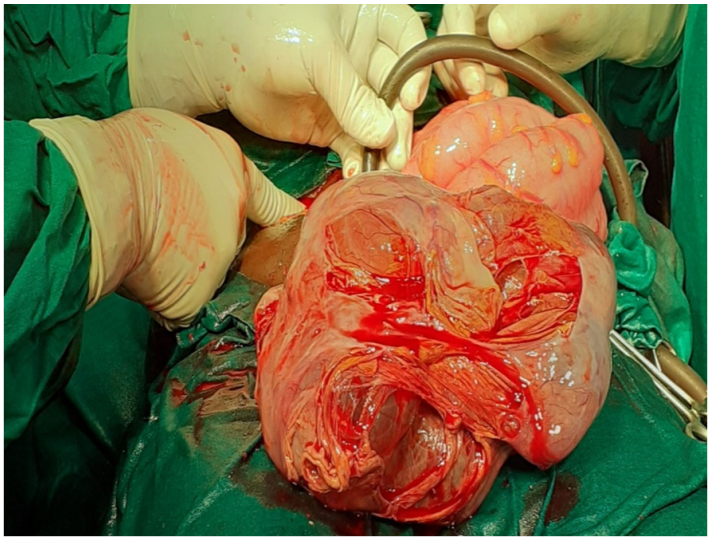
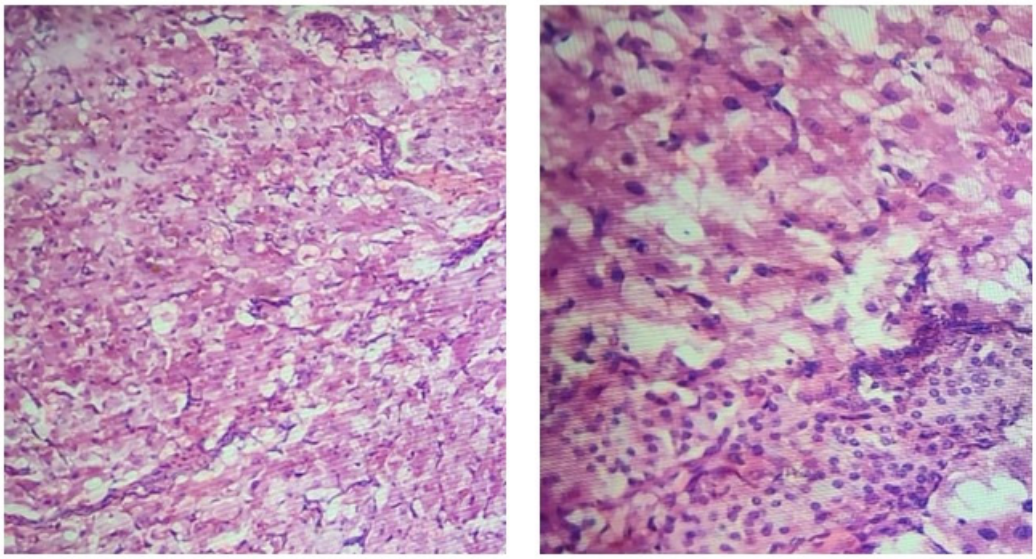
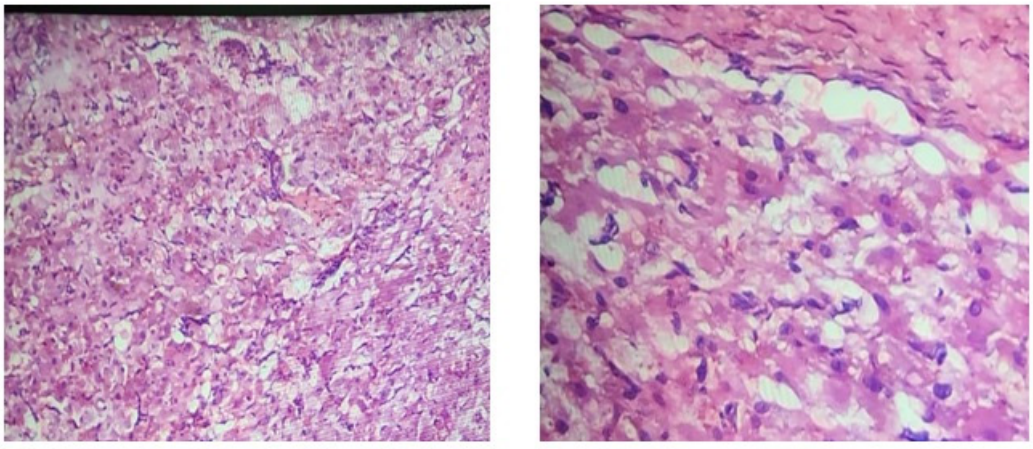


Figure 2: Ruptured right ovarian cyst.



Histology of right ovary



Histology of left ovary

Figures 3, 4: Histology of ovarian tissues showed cystic lining composed of inner layer of luteinized granulosa cells and outer layer of theca cells. Granulosa cells are polygonal in shape with abundant eosinophilic cytoplasm and central rounds nucleoli. The outer theca cells are smaller in size.

Serial B-hCG was done in order 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 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 complications 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]. Index case 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 peritonitis. If patient present with symptoms of acute abdomen emergency laparotomy or laparoscopic surgery must be done [1,5-8]. The present case underwent emergency laparotomy due to symptoms and signs of acute abdomen secondary to ruptured ovarian cysts (Figures 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 [6,8]. In the present case the patient had huge bilateral follicular ovarian cysts (Figures 3,4). Leiserowitz and other colleagues reported on the similar findings.

In addition to that most ovarian masses during pregnancy are functional cyst and resolves after 14-18 weeks, but if persist after 16 weeks, the masses are predominantly nonfunctional [5,8]. The index case had bilateral follicular ovarian cysts at 19 weeks of pregnancy, which portrayed the possibility of being a non functional ovarian cyst.

Furthermore, these enlargements may mimic molar pregnancy of ovarian tissue during pregnancy [9-12].In the present case serial serum hcg were done and were normal.

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 has features suspected of malignancy or the women has completed her reproductive carrier.

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