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GIANT MATURE CYSTIC TERATOMA: AN UNUSUAL PRESENTATION IN PREGNANCY

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ABSTRACT

Introduction: Mature cystic teratomas are the most common tumours of the ovary in pregnancy. Torsion is a common complication as the tumour size increases. The giant forms of ovarian cystic teratoma are not common and even rare in pregnancy. **Case presentation:** A 29 year old multipara who presented to our facility with recurrent abdominal pain of 2 years, abdominal swelling of 20 months duration and pregnancy of 18 weeks gestational age. Abdominal examination revealed grossly distended abdomen. Abdominopelvic ultrasound revealed a huge cystic mass arising from the pelvis. She was managed for twisted ovarian cyst in pregnancy and subsequently had laparotomy and right salpingoophrectomy. Histology revealed mature cystic teratoma of the ovary. The pregnancy was carried to term uneventfully. The patient had vaginal delivery of a live male baby with good APGAR score. **Conclusion:** Giant teratomas are not common it is even more unusual to see such huge tumour in pregnancy.

KEYWORDS: Mature cystic teratomas are the most common tumours in pregnancy.

INTRODUCTION

The management of adnexal mass in pregnancy could be challenging to both the patient and the clinician. The type of ovarian masses are reflective of patients age and therefore benign tumours such as benign cystic teratomas and serous cyst adenomas predominate in women of reproductive age group.[1] Mature cystic teratomas are the most common benign ovarian tumours in pregnancy.[2] It account for 20-40% of tumours in pregnancy.[3] The possibility of malignancy or complication such as torsion can tilt the decision for intervention as against conservative management. The interventions ranges from cystectomy to oophrectomy for benign complicated and uncomplicated ovarian cysts. Mature cystic teratomas larger than 15 cm are very rare especially in pregnancy. We present a multipara at 18 weeks gestation with huge ovarian mature cystic teratoma that had twisted on its pedicle. She subsequently had oophrectomy.

CASE PRESENTATION

We present a 29 year old multipara, whose last child birth was 3 years prior to presentation. She was 18 weeks pregnant. She presented to the gynaecological outpatient clinic with symptoms predating pregnancy; recurrent abdominal pain of two years and feeling of abdominal mass 20 months duration. The mass had gradually increased in size since it was noticed and with the pregnancy there was increasing discomfort. The pain became severe and persistent about 24 hours before presentation. She had no urinary or cardiopulmonary symptoms. There was no personal or family history of ovarian, breast, endometrial or colonic tumours. She had not received any antenatal care in the pregnancy.

On physical examination, she weighed 83kg and her height was 156cm. She was afebrile, not pale and had no pedal oedema. There were no enlarged lymph nodes. The chest was clinically clear. Her blood pressure was 120/80mmhg and pulse rate was 100 beats per minute.

The abdomen was grossly distended. There was generalized tenderness making the abdominal organs and uterine contents difficult to assess. A diagnosis of ovarian cyst torsion was suspected.

An abdominopelvic ultrasound showed a normal singleton, live intrauterine pregnancy at 18 weeks gestational age. There was a cystic mass arising from the pelvis, however it could not be accurately measured as the widest diameter was beyond the view of the ultrasound probe. The cyst wall was smooth, contains clear fluid. There were no solid elements or septations

seen. The liver, spleen, kidneys were all normal. There was no ascites.

Her pack cell volume was 34%, Blood group B Rhesus D positive. Urinalysis was normal. The liver and renal function tests were within normal range. She was subsequently planned for laparotomy.

Intraoperative findings were; no ascitis, no tumour deposit on peritoneum, there was a right ovarian mass measuring 30cm by 30cm by 25cm with no tumour deposits on the surface. The right tube was adherent to the cyst. The cyst weighed 23kg. There was an intact gravid uterus of about 18 weeks size. The left Ovary and left tube were grossly normal. She had a right salpingo-oophorectomy and the removed tissues were sent for histopathological evaluation. The post operative period was uneventful. She was placed on antibiotics, analgesic and 20mg of nifedipine as tocolytic for 5 days. Macroscopically, the cyst was unilocular, smooth surface with an area in the wall with hair tuft. Microscopically, sections showed cyst wall lined by cuboidal epithelium and stratified squamous epithelium in other areas. Within the wall there were pilosebaceous units, adipose tissues, Cartilage and thyroid follicles. The overall features are those of dermoid cyst.

She was booked for antenatal care and then discharged home. The pregnancy was subsequently closely monitored and the antenatal period remained uneventful. She had a successful spontaneous vaginal delivery of a live male baby with good Apgar scores and weight of 3.0kg. There were no complications during labour and puerperium.

DISCUSSION

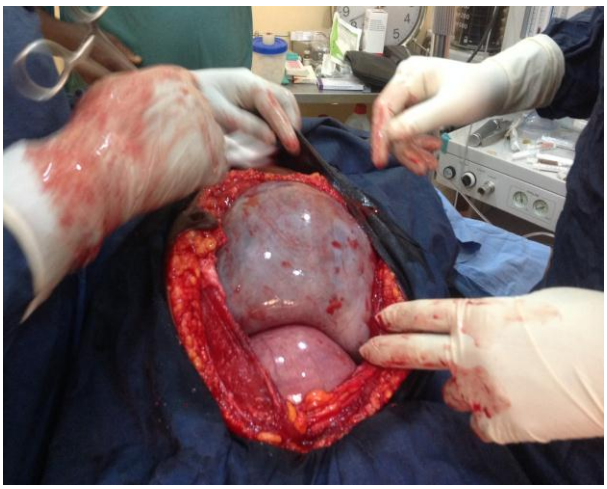
The most frequent ovarian tumours during pregnancy are mature cystic teratomas, occurring in 0.3% of pregnancies.[4] This is also a reflection of frequency of ovarian tumours in women of reproductive age group. The size of cystic teratomas may vary between 1 cm to 45 cm but those greater than 15 cm are rare. We could not find a reported case of benign cystic teratoma in pregnancy as large as that of our patient.

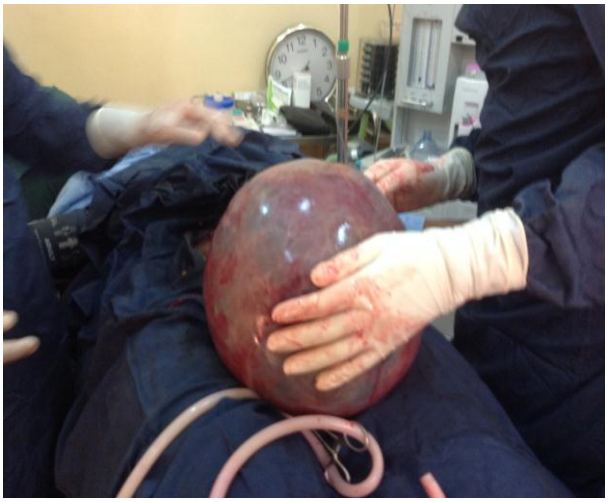
Management of ovarian masses in pregnancy depends on the size, sonographic features and presence of symptoms. Ovarian dermoids that measure less than 6 cm are unlikely to grow significantly in pregnancy and can be managed conservatively as the risk of complications such as torsion are likely to be low.[5] In the case presented the tumour was huge and could not be accurately measured on ultrasound. 'Rokitansky nodule', a hyperechoic nodule with acoustic shadowing in a background of low level echoes, 'tip of iceberg phenomenon' where a highly echogenic cyst, contents of sebum and hair causes posterior attenuation of sound, 'dermoid mesh' multiple interdigitating lines and dots which are seen when hair is floating in a sebum are features that can be seen on ultrasound. The presence of two of the above has 100% positive predictive value for dermoid cyst.[6] However this features were not reported in the ultrasound our patient did. Although MRI can provide valuable diagnostic information beyond the ability of the ultrasound, the use of MRI is only advised where ultrasound diagnosis is uncertain, masses are too big to be fully assessed by ultrasound or suspicion of malignancy.[7]

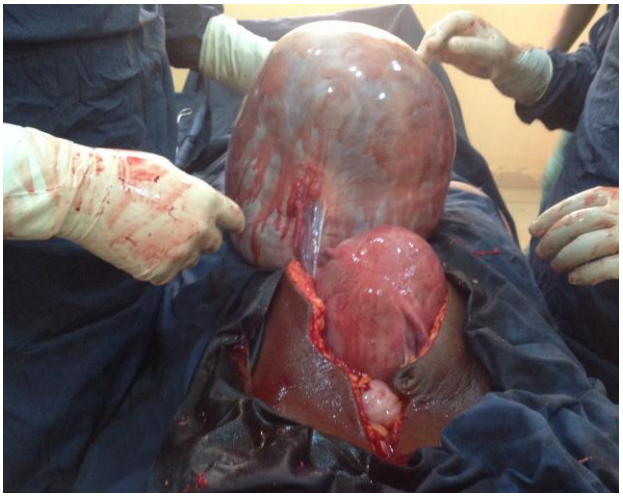
During pregnancy, serum AFP, beta-hCG and inhibin are elevated due to placental synthesis and therefore the use in evaluating a suspicious ovarian cyst is limited. Some researchers have suggested a cut-off level of 112 i.u/ml as upper limit of normal in pregnancy compared to 35i.u/ml in non-pregnant state.[8]

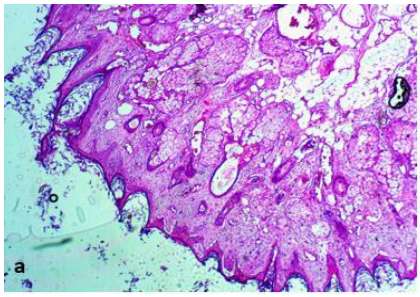
Elective surgery for removal of ovarian cysts should be after 14 weeks gestation to minimize the risk of fetal loss although the risk is small.[1] However complications such as torsion may necessitate surgery irrespective of gestational age. In this case the patient presented at 18 week gestation with torsion resulting in the emergency surgery.

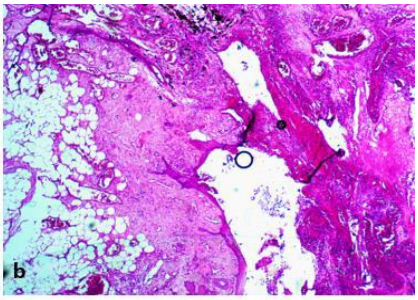
The standard approach is to perform the surgery via laparotomy but laparoscopic surgery has been used although it is skill dependent and time consuming.[9] Where laparoscopy is performed open (Hasson) method is preferred to prevent uterine injury from trochar introduction.[10] Our patient presented with 18 weeks pregnancy and huge ovarian cyst complicated by torsion hence the need for emergency laparotomy.

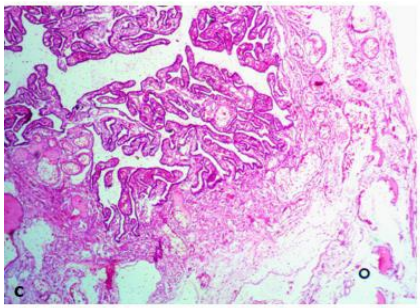


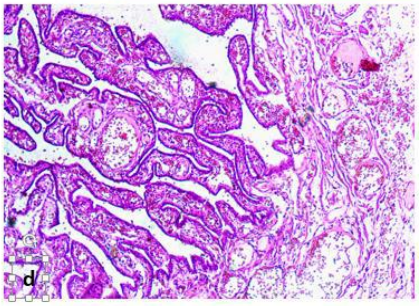












CONCLUSION

Ovarian cystic teratoma is the most common ovarian tumour seen in preganancy. Torsion is a common complication of teratoma especially in pregnancy and puerperium. Giant teratomas are not common, it is even more unusual to see such huge tumour in pregnancy.

REFERENCES

1. Sanaullah F, Trehan AK. Ovarian cyst impacted in the pouch of Douglas at 20 weeks gestation managed by laparoscopic ovarian cystectomy: a case report. J Med Case Rep., 2009; 3: 7257 Accessed 10.1186/1752-1947-3-7275.
2. Tariel C, Huissoud C, Rudigoz RC, Dubernard G.Presumed benign ovarian tumours during pregnancy. J Gynecol Obstet Biol Rerod (Paris)., 2013; 42(8): 842-55.
3. Dutta.
4. De Sanctis M, Licameli A, Spagnuolo T, Scambia G. Laparoscopic management of large, twisted dermoid cyst: a case report. J Reprod Med., 2013; 58(5): 271-6.
5. Caspi B, Levi R, Appleman Z, Rabinerson D, Goldman G, Hagay Z. Conservative management of ovarian cystic teratoma during pregnancy and labour. Am J Obstet Gynecol, 2000; 182: 503-5.
6. Patel MD, Feldstein VA, Lipson SD. Cystic teratoma of the ovary: diagnostic value of sonography. Am J Roentgenol., 1998; 171: 1061-65.
7. Hoover K, Jenkins TR. Evaluation and management of adnexal mass in pregnancy. Am J Obstet Gynecol., 2011; 205: 97-102.
8. Aslam N, Ong C, Woelfer B, Nicolaides K, Jurkovic D. Serum CA125 at 11-14 weeks of gestation in women with morphologically normal ovaries. BJOG, 2000; 107: 689-90.
9. Katke RD. Giant mucinous cystadenocarcinoma of ovary: a case report and review of literature. J Midlife Health., 2016; 7(1): 41-44.
10. Al-Fozan, Tulandi T. Safety and risk of laparoscopy in pregnancy. Curr Opin Obstet Gynecol, 2002; 14: 375-9.