East African Medical Journal Vol. 94 No. 9 September 2017
LARGE FOLLICULAR CYST IN PREGNANCY
A.B. Bugah, Post graduate student department of obstetrics and gynecology, University of Nairobi P.M. Ndavi, Associate professor department of obstetrics and Gynecology, University of Nairobi G. Jaldesa, Associate professor department of obstetrics and Gynecology, University of Nairobi, P.L.Njoroge, Post graduate student department of obstetrics and gynecology, University of Nairobi

LARGE FOLLICULAR CYST IN PREGNANCY

A.B. BUGAH, P.M. NDAVI, G. JALDESA, and P.L. NJOROGE

SUMMARY

A large (300mm*200mm*200mm) uniloculated cyst was detected via ultrasound at 20 weeks' gestation in a 30-year-old woman with a singleton pregnancy. Gradually increasing abdominal distention with associated respiratory embarrassment warranted laparotomy and a cystectomy performed and subsequent pathological examination revealed a large follicular cyst. The pregnancy progressed well and a live male infant birth weight 3200 grams with a good Apgar score delivered vaginally at term. Large cyst are uncommon and thought to be stimulated by human chorionic gonadotropin (hcg) or increased sensitivity to hcg. Surgeries during pregnancy are performed to avoid complications such as torsion, haemorrhage, rupture and on rare occasion danger of malignancy. Literature search on previous cases, report good pregnancy outcomes following surgery as is of this case report.

INTRODUCTION

The incidence of adnexal masses in pregnancy has been reported to range from 1 in 81 to 1 in 2200 deliveries (1) with the incidence increasing due to the usage of ultrasonography during the antenatal period leading to the discovery of small asymptomatic simple cyst and also due to the increased usage of ovulation induction drugs (2). Most adnexal masses identified in pregnant women are usually benign, simple and small less than,5cm in diameter with majority being functional cyst either follicular and corpus luteum cyst that are known to occur as part of the normal physiological function of the ovary.

Most masses resolve spontaneously by the early part of the second trimester, with malignancy potential being rare as low as 2.8% of all adnexal masses in pregnancy (3,4).Complications of the cysts associated with pregnancy are torsion, rupture of the cyst, urinary retention or bowel obstruction when impacted on the pelvis, obstructed labour and malpresentations may occur (5).This Case report discusses a large follicular cyst identified during the 2nd trimester that warranted surgical intervention.

CASE REPORT

A 30-year-old lady, Mrs J.A. para 3+0 gravida 4, with 20 weeks and 3 days of amenorrhea, presented with complaints of an abdominal swelling that was larger than her dates, associated with on and off pain and difficulty in breathing. The abdominal swelling had been progressive since conception with globular pain and difficulty in breathing that worsened on laying supine.

There were no changes in bowel movement or urinary symptoms and had started to perceive fetal movements. Patient had not started her antenatal clinic thus her profile was unavailable. Her gynaecological history, she had been on follow up at another facility for 2 months prior to conception for an ovarian cyst 5cm by 4cm and was on conservative management. Her contraceptive history, usage of depo Provera for the prior 6 years.

No history of Pap smear or any cervical cancer screening done. Her menarche was at 16 years, cycle was irregular with normal flow and no dysmenorrhea. Her obstetric history was unremarkable; all her prior deliveries were vaginal deliveries at term with no complications. Her past medical and surgical history were noncontributory. Investigations done included abdominal ultrasound that showed a massive simple cystic mass involving the abdomen and pelvis surrounding a gravid uterus with clear borders.

The size could not be calculated due to the wide margins. Other viscera were normal. Obstetric scan revealed a single live intrauterine pregnancy at 20 weeks and 3 days' gestation a fetal heart rate of 154bpm.Her laboratory investigations included a kidney functions test and liver functions test that were within the normal reference range. Antenatal profile was unremarkable with the hemoglobin of 13.4g/dl blood group O positive VDRL and HIV were negative.CA-125 and CEA were also done and were within normal reference range.

On examination she was in a fair general condition her vitals were within normal parameters. Per abdomen she had an abdominal mass that was approximately 36 weeks of gestation, non-tender and mobile. The uterine fundus could be delineated on deep palpation and was at 20 weeks of gestation. Fluid thrill and shifting dullness were negative.

A decision for open laparotomy was made due to the progressive respiratory embarrassment that the patient was exhibiting. Intra operative findings a large cystic mass on the left approximately 30cm by 30 cm the ipsilateral ovary could not be delineated from the mass. Contralateral ovary was normal, and the uterus was approximately 22 weeks of gestation in size. Cystectomy and oophorectomy was performed as sparing of the ipsilateral ovary could on be achieved on the left.

Specimen was taken for histopathology Patient was observed in the ward for 3 days and was placed on analgesia, antibiotics for a period of 5 days and progesterone pessaries. An obstetric ultrasound on day of discharge reassured the fetal well-being. She was discharged on oral analgesia, antibiotics and progesterone pessaries.

Her post-operative visits were unremarkable, with a normal growing pregnancy. Histopathology results; Grossly- a large cystic tissue 300*200*200mm, white brown in color, uniloculated cyst with dark brown fluid. Microscopy-sections showed a cystic wall lined by a flattened cuboidal epithelium. Diagnosis of a large follicular cyst was made. The pregnancy progressed well and went into spontaneous labour at 40 weeks and 3 days of gestation and delivered a Live Male Infant with a birth weight of 3200 grams with a good Apgar score.

IMAGE A

Pre-operatively, abdominal distension

IMAGE B

Intraoperatively-delivery of the ovarian cyst

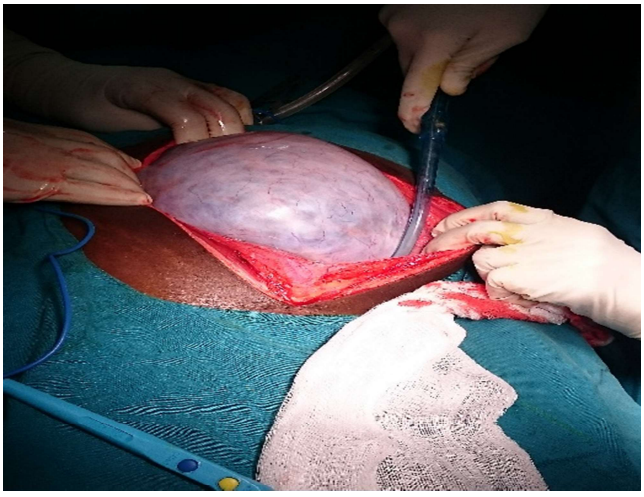
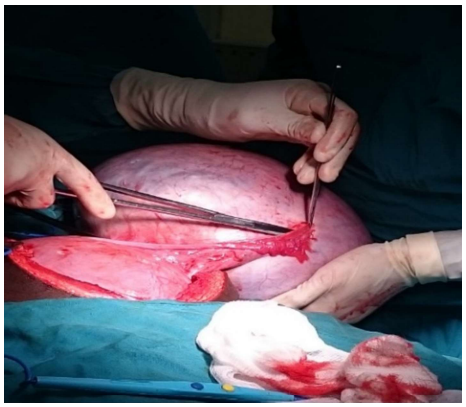


IMAGE C

Intraoperatively- image of the ovarian cyst with the uterus at 22 weeks



DISCUSSION

There is a higher frequency of occurrence of adnexal masses during the reproductive years and also during pregnancy. Most of the adnexal masses identified during pregnancy are small and benign with resolution during the early second trimester.

The percentage of potential malignancy is low being approximately 2.9 %(5). Management of adnexal masses during pregnancy presents a difficult clinical decisions performing abdominal surgery poses a risk to the fetus and the mother. In contrary an approach of conservative management may result in complications such as torsion or rupture of the cyst.

In 1963, it was suggested by Munndell that surgical removal of an ovarian cyst during pregnancy was indicated for 3 reasons (5):

1). To eliminate the possible cause of dystocia

2). Danger of torsion, rupture or haemorrhage

3) Danger of malignancy with some investigators strongly recommending the removal of all adnexal masses persisting into the second and the third trimester owing to the risk of malignancy. In this case surgical removal was warranted due to increasing respiratory difficulties with increasing gestation and also the possibility of rupture and haemorrhage of the cyst Most studies report good pregnancy outcomes of the patients after surgery with maternal mortality rarely reported.

This can be reassuring to surgeons to perform operation in pregnant women if need is warranted (5).In contrast Whitecar MP et al reported a higher adverse pregnancy outcome in patients who underwent emergency surgery as compared to elective surgery. They attributed this to already occurred complications of haemorrhage and rupture and also having a small study group for evaluation (6).

REFERENCES

1. Choudhury NR. Ovarian Tumors Complicating Pregnancy in J Obstet Gynecol 1962; 83:615-618
2. Leiseowitz GS, Xing G, Cress R et al. Adnexal Masses in pregnancy: how often are they malignant? Gynecol Oncol 2006; 101:315.
3. Scmeler KM, Mayo-Smith WW, Peipert JF, et al. Adnexal masses in pregnancy: Surgical compared with observation. Obstet Gynecol 2005;105:1098
4. Giuntoli RL, Vang RS, Bristow RE, Evaluation and management of adnexal masses during pregnancy. Clin Obstet Gynecol 2006; 49:492
5. Apichart C, Apiwat W, Pratak O, et al: Adnexal Masses in Pregancy in J Med Assoc Thai 2005; 88(suppl 2)S 37-40
6. Whitecar MP, Turner S, Higby MK et al: Adnexal masses in pregnancy: review of 130 cases undergoing surgical management. AmJ Obstet Gynecol 1999:181:19-24