CASE REPORT

A large Multilocular Mucinous Cystadenoma in 2nd trimester of pregnancy.

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Abstract:

Adnexal masses in pregnancy occur in 0.5c2/1000 pregnancies. Ovarian Malignancy is the second most common gynecological malignancy diagnosed during pregnancy. A primigravida aged 20 years presented with pregnancy for 21+ weeks with lower abdominal pain, discomfort and breathlessness for last 10 days. Sonographic examination revealed a huge multilocular cyst with septation and an alive fetus of about 21 weeks of gestation. Intra operative findings multilocular cyst were huge multilocular twisted left ovarian cyst (19. 5 x 19. 5cm) with straw coloured mucinous fluid. Left salphingo-oophorectomy was performed followed by peritoneal washings and staging with omental biopsy. Histopathology revealed mucinous cystadenoma with inflammatory changes in omentum, no malignant cells in peritoneal washings. She was under regular supervision and delivered a Male baby of 2.8 kg at 39 weeks of gestation with good APGAR score.

Key words: Mucinous cystadenoma, salphingo-oophorectomy, Ovarian Malignancy

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Introduction:

Adnexal masses in pregnancy occur in 0.5-2/1000 pregnancies1. More than 90% of cysts are benign. Physiological cysts are common before 12 weeks. Pathological cyst is like dermoid and cystadenoma are common to persist after 16 weeks. They represent 60% of the total adnexal masses removed during pregnancy. Mucinous cystadenoma are benign epithelial tumors that are typically multilocular, thin walled cyst with smooth external surface containing mucinous fluid.

These are amongst the largest tumors of ovary, may reach enormous dimensions. Of all ovarian tumors, mucinous tumors comprise 12% to 15% and 75% of all tumors, 10% borderline &15% invasive carcinoma.[2]

The most frequent and serious complication of a benign cyst is during pregnancy is torsion. The incidence is reported to be 5%. Torsion is common in the first trimester or puerperium leading to even rupture of the cyst into peritoneal-cavity.[1]

Case report:

A primigravida lady 20 years, hailing from Jamalpur, admitted in Shaheed Monsur Ali Medical College & Hospital, Uttara, Dhaka, Bangladesh with the complaints of pregnancy for 21+ weeks with lower abdominal pain, discomfort and breathlessness for last 10 days. Her pregnancy was confirmed by early USG and urine for pregnancy test. She was not under regular antenatal checkup. She noticed her abdomen hugely enlarge with short period of time with Epigastric discomfort and indigestion. Suddenly she developed severe lower abdominal pain.

There was nothing significant regarding her past medical and surgical history.

On examinations, her appearance was ill looking and she was mildly anemic but normotensive. The abdominal examination showed markedly distended abdomen. Fundal height extended up to the xiphisternum which did not correspond to her gestational age. Fetal

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heart sounds were audible with fetoscope. Fluid thrill was negative.

Obstetric ultra sound showed a large cystic structure of more than (19. 5 x 19. 5cm) is seen in the abdomen extending from lower pelvis up to left hypochondrium. Multiple internal septations and internal echoes are seen within the mass. Fetal parameters correspond to 22 weeks of gestation with adequate liquor and fetal placenta.

Her family was counseled in detail. Laparotomy followed by Left salphingo-oophorectomy was performed followed by peritoneal washings and staging with omental biopsy was done. Right ovary was normal. intra-operative findings were large, multilobulated left sided partial twisted ovarian tumor (20 x20cm) was found which occupied upper part, whole of abdomen extend up to xiphisternum. Straw coloured thick jelly like mucinous fluid up to 2 liters aspirated before delivering the cyst out of the abdomen. The post-operative course was unremarkable.

Histopathology revealed mucinous cystadenoma and inflammatory changes in omentum, peritoneal washings were clean. She was discharged with regular antenatal follow-up. She delivered vaginally a baby 2.8kg at 38 weeks with good APGAR score.

Discussions:

Most adnexal masses are discovered incidentally during pregnancy because of routine use of ultrasound.

Management depends upon the symptoms, gestational age, size and characteristics of the cyst. If the mass is unilateral, unilocular and <6cm, observation is recommended. If the mass is larger than 6cm, solid, bilateral, persists into second trimester or become symptomatic then surgical intervention is required.

Elective surgery should be delayed until second trimester. Simple cystectomy should be attempted as primary therapy. contralateral adnexa should be examined for pathology. Once mass is removed it must be opened and examined. If there is any suspicion of malignancy frozen sections should be obtained and acted on accordingly. Most masses in pregnancy are benign in character and malignancy rate is low.

Mucinous cystadenomas are common and account for up to 20% of all ovarian tumors. In approximately 10% of cases the tumors is bilateral. They may attain a very large size and may be multilocular. The outer wall varies in thickness and is white, grey or silvery blue in color. Adhesions to adjacent tissues are not present unless there have been degenerative changes in the wall.

The cysts are lined by tall columnar cells and these secrete mucus material - a glycoprotein with a high content of neutral polysaccharide. The fluid consistency and glairy and is colorless yellow, green or brown depending on the presence of blood pigment derived from previous intracystic hemorrhages.

A rare complication of an active cyst which ruptures and spills into the peritoneum is pseudomyxoma peritonei, a condition in which the epithelial cells of the tumors invade the omentum and also spread as a film over the visceral and parietal peritonium.3

Mucinous cystadenomas are benign epithelial ovarian tumors that are characterized by multilocularity, smooth outer and inner surface and tend to be large reaching 20-30cm containing mucinous fluid. Mucinous cystadenomas are one of the largest tumors known. There are several case reports in literature showing huge mucinous cystadenomas.

Complicating the pregnancy and need emergency surgical intervention as such this case.4-6

There are some reports of mucinous cystadenomas causing virilization during pregnancy 7-8. In addition, there have been several reported huge mucinous cystadenomas found in pancreas, mesentery and omentum during pregnancy.9

It is included that ovarian cyst in pregnancy must be followed up properly. Early diagnosis and appropriate intervention is associated with best fetomaternal outcome.

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