



BMH Med. J. 2018;5(3):74-78 **Case Report**

## Pregnancy With Huge Ovarian Cyst

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### Introduction

Ovarian masses are not uncommon in pregnancy. Incidence of ovarian mass in pregnancy is reported to be about 1 in 1000 [1]. The most common ovarian masses seen in pregnancy are functional cysts of ovary; others being benign cystic teratomas, serous cystadenoma, paraovarian cyst, mucinous cystadenoma and endometrioma [2]. The major concern of ovarian mass in pregnancy is it's likely complication to undergo torsion (partial or complete twisting of ovary on its ligamentous supports, often resulting in impedece of its lymphatic and venous outflow and arterial inflow leading to stasis, venous congestion, haemorrhage, necrosis and sometimes cyst rupture). Predisposing factors associated with torsion are moderate to large size of ovarian mass, long pedicle and free mobility. Here we are presenting a case report of a huge ovarian mass detected and managed in early pregnancy.

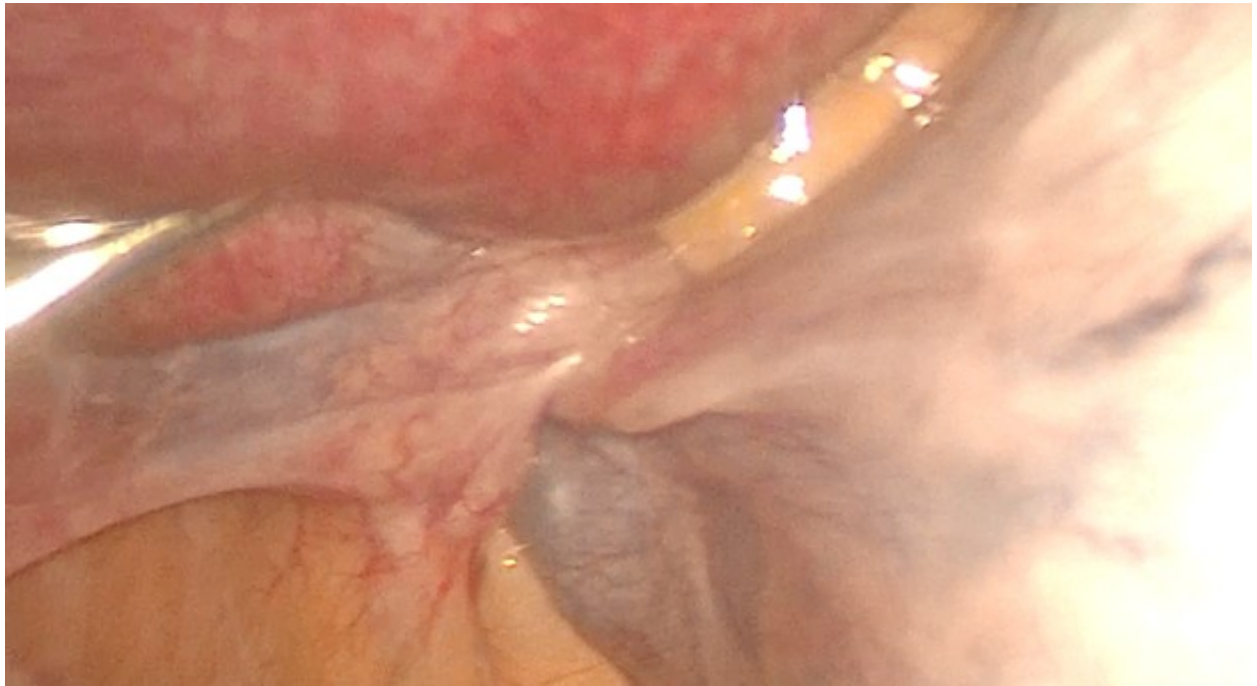
### Case report

Young female, G2P1L0 with 14 weeks of gestation presented to emergency department with chief complaints of on and off abdominal pain since 3 days. Pain was of diffuse nature, colicky type, increased in severity on the day of presentation to the hospital. No history of vaginal bleeding, vomiting or other aggravating / relieving factors. No history of fever, syncopal attacks, bowel or bladder complaints. Her previous menstrual cycles were regular. Her present obstetric history was uneventful till date. Her previous pregnancy was by caesarean section and baby died at 8 months of life due to a genetic syndrome (Severe Combined Immunodeficiency). She had no other significant past, personal or surgical history.

On examination she was conscious and in severe pain. Her blood pressure was 120/70 mm of Hg, pulse rate was 110/minute, she was afebrile. There was no pallor. Abdominal examination revealed uterine height corresponding to around 28-30 weeks of gestation. Abdomen was so tender that proper examination couldn't be performed. She was taken for emergency ultrasound examination which showed a single intrauterine live pregnancy of 13 weeks 1 day gestation along with a large serous cystadenoma in the left ovary of size 18 x 13 x 15 cm, thin striations, no solid elements or calcification. She was started on parenteral analgesics and preliminary investigations were sent. Her pain subsided, but due to the large size of ovarian cyst and possible complications as pregnancy

progresses, she was taken for elective laparoscopic ovarian cystectomy under general anaesthesia on the next day.

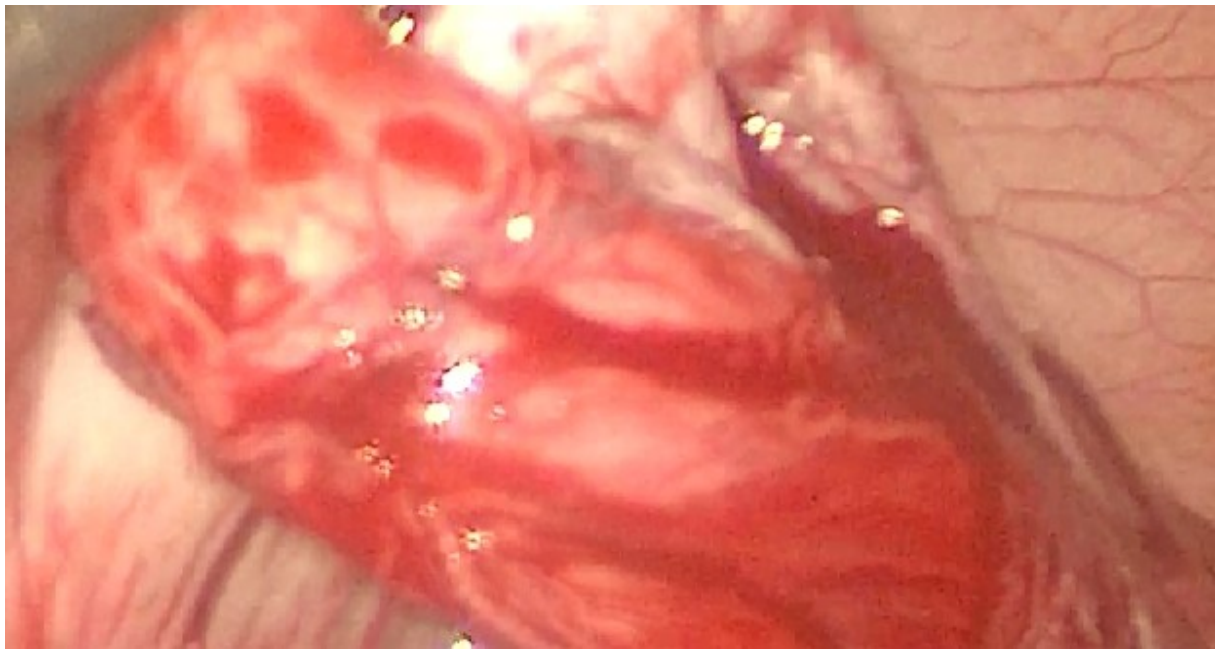
Per operatively uterus was uniformly enlarged to 14 weeks of pregnancy. Left ovary was seen enlarged with a large cyst of 18 x 17 x 16 cm size and was twisted twice on its pedicle. Cyst was punctured and drained around 1 litre of cloudy mucinous material. The pedicle of left ovarian mass was untwisted and ovarian cystectomy was done. Other side ovary and Fallopian tube were found to be normal. Specimen was sent for histopathological examination.



**Figure 1:** Ovarian cyst seen twisted twice on its pedicle (laparoscopic view)

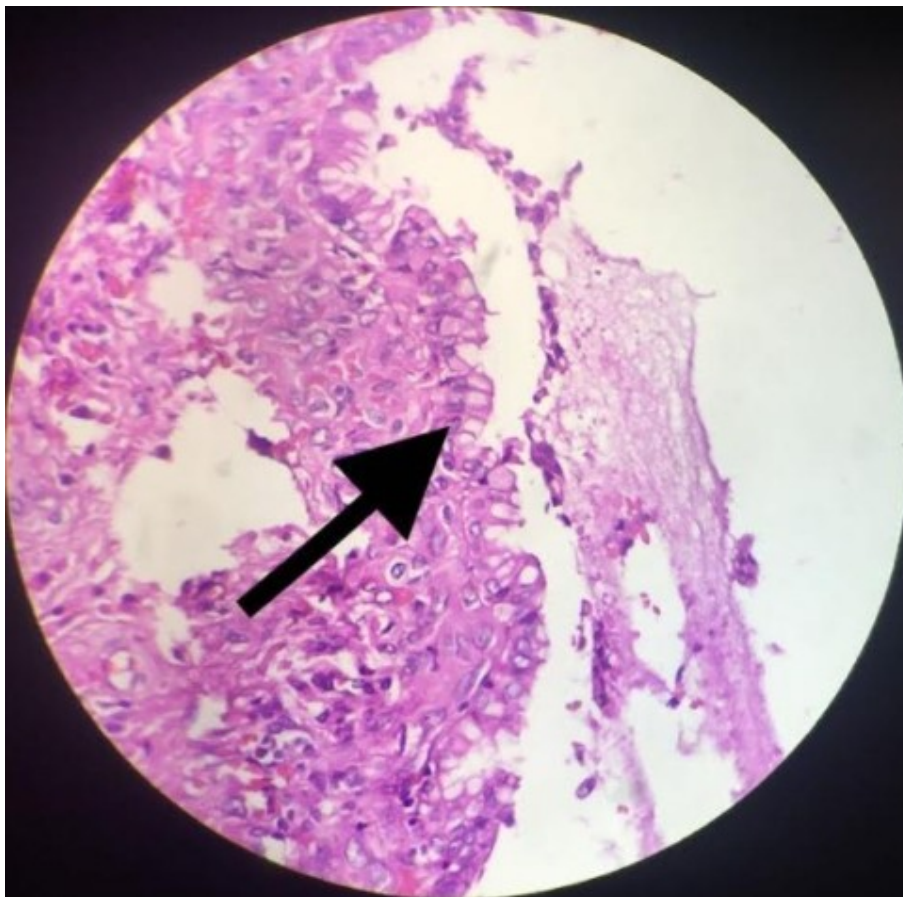


**Figure 2:** Laparoscopic view of large ovarian cyst seen along with uterus

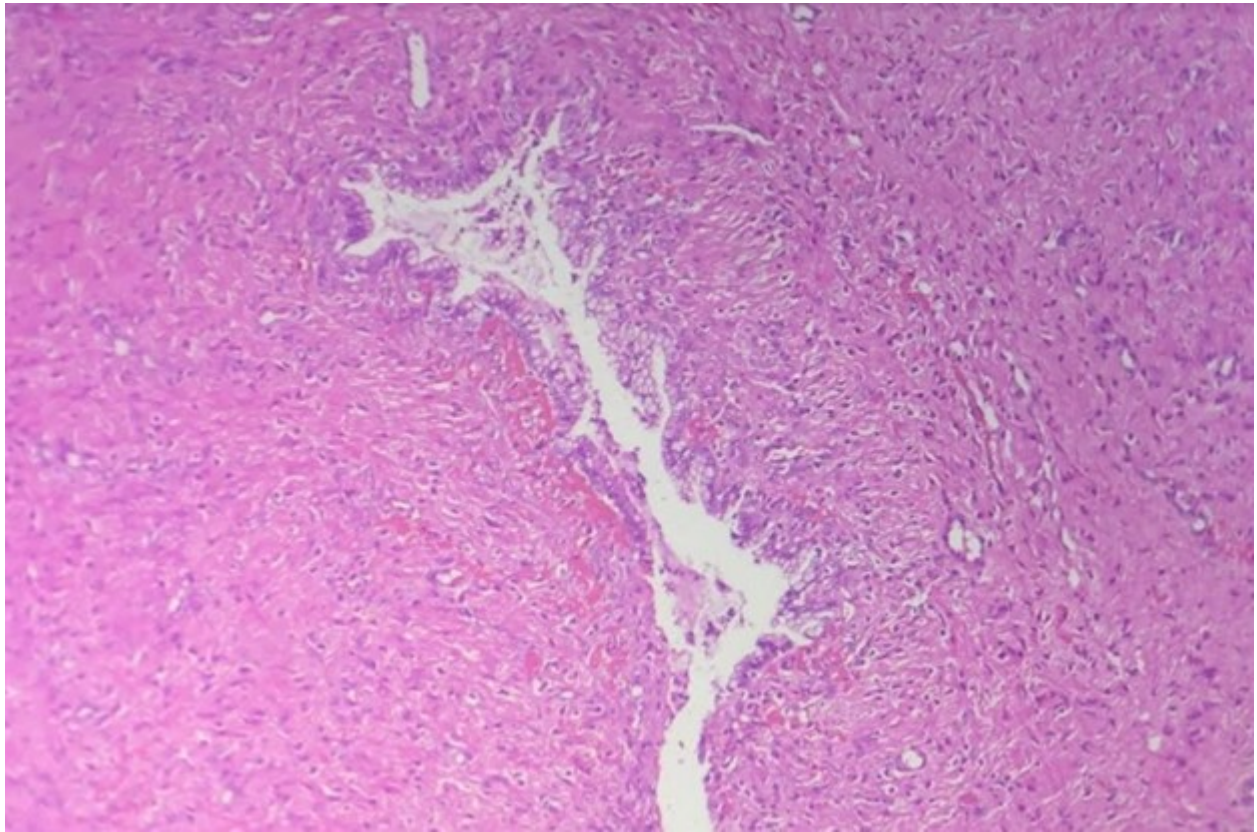


**Figure 3:** Laparoscopic ovarian cystectomy

Patient's postoperative period was uneventful. She was given uterine relaxants, tocolytics and injectable antibiotics for 48 hours. Ultrasonography was done postoperatively and viability of fetus ensured. She was given weekly Proluton injections for four weeks. Histopathology report came out to be mucinous cystadenoma ovary and patient's pregnancy continued to be monitored on OPD basis after discharge on the third postoperative day.



**Figure 4:** Tall cells with basal nucleus and abundant intracellular mucin-mucinous cystadenoma ovary.



**Figure 5:** Low power view

## Discussion

Mucinous cystadenoma is a benign epithelial ovarian tumour which tend to be unilateral and multilocular with smooth surface and contain mucinous fluid.it usually occur in the third to fourth decade of life and can reach upto 20-30 cm in size [3]. 75% of mucinous tumours are benign, 10 % borderline and 15% invasive carcinomas [3]. Giant cysts are found in less than 1% of cases of ovarian cysts with pregnancy [4].

Torsion is the most common and serious complication of large benign ovarian cysts in pregnancy. The other complications which might occur are rupture of cyst, infection, malignancy, impaction of cyst in pelvis, obstructed labour and malpresentation of fetus [5]. Corpus luteal cysts in pregnancy spontaneously regress by 16 weeks of gestation.

Management of ovarian cysts depends on the size of the cysts. Cysts of less than 6 cm diameter and benign appearance on ultrasonography can be managed conservatively and kept under follow up as most of them resolve spontaneously over time. Cysts of more than 10 cm diameter are generally resected due to fear of complications like torsion, rupture and increased chances of malignancy. Management of cysts with diameter between 6-10 cm is controversial. If they have ultrasound picture of solid components, papillary excrescences, septae and nodules, it is better to resect them due to increased risk of malignancy. If the cyst has picture of a simple cyst, then it can be followed by serial sonography. However it has to be kept in mind that even these cysts may necessitate emergency laparotomy and exploration if complications like torsion, rupture or necrosis arise as seen in as many as 50 % cases [3].

## Conclusion

Huge ovarian cysts when detected in early pregnancy, if possible to wait, should be managed surgically in second trimester of pregnancy due to minimal risk of surgical complications. Surgical complications are more common in first trimester. Diagnosis is established by characteristic history,

examination findings and confirmed by transvaginal sonography. Whenever this complication (huge ovarian cyst and torsion) is encountered, it is important to go for surgery, either laparoscopy or laparotomy.

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