



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

RUPTURED DERMOID CYST PRESENTING AS ABRUPTION PLACENTAE: CASE REPORT.

KEY WORDS: preterm labour pains, mature dermoid cyst, teratoma, abruption placentae

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ABSTRACT

Introduction: Mature cystic teratoma (Dermoid) is one of the common benign ovarian neoplasms discovered during pregnancy. To the best of our knowledge this is the first reported case of 24 years second gravida with previous one abortion with ruptured dermoid cyst presenting as abruption placentae at 30 weeks of gestation for which laparotomy was done following preterm vaginal delivery.

Conclusion: Each pregnant lady should have ultrasonography during pregnancy and ovary should be looked for any dermoid cyst and treated during second trimester so as to avoid any complications.

INTRODUCTION:

Mature cystic teratoma of the one of common ovarian neoplasm, accounting for to 5 to 25% of all ovarian tumors. It occurs most commonly in young females and is bilateral in 8–15% of cases. Torsion, rupture, infection and obstruction during labour are known complications. Dermoid can lead to complications during antenatal period also, spontaneous rupture can occur, though uncommon.

CASE REPORT:

A 27 years female G2A1 unbooked pregnancy, presented in the emergency of GMCH, Sector 32, Chandigarh, at 30+2 weeks period of gestation with complaint of bleeding per vaginum for 4 hours. There was no history of pain abdomen, leaking per vaginum, similar bleeding prior to this episode or any hypertensive disorder. Patient was perceiving regular fetal movements. On examination, she had tachycardia of 110 bpm but her blood pressure was normal. Mild pallor and pedal edema was present. Chest and CVS examination was normal. On per abdomen examination, fundal height corresponded to 34–36 weeks, uterus was tense and tender and fetal heart was normal. On per speculum examination, cervix was patulous and dark altered colored blood was seen through cervical os. On per vaginum examination, cervical os was 2–2.5cm dilated, 30–40% effaced, soft, central and membranes were present. On ultrasonography, placenta was anterior in upper uterine segment with no placental abnormality and no retroplacental clot was detected.

With clinical diagnosis of non toxemic abruption, artificial rupture of membrane and augmentation of labour was done. Patient had normal progress of labour and delivered vaginally a normal live baby. Post delivery distension and tenderness of abdomen persisted. Uterus was well retracted below umbilicus. Bowel sounds were present and dull note was heard over whole abdomen. Bleeding per vaginum was minimal. Ultrasound showed free fluid in the abdomen, so paracentesis was done and yellowish mucoid, non foul smelling, pus like content was aspirated. Patient was taken for laparotomy in view of pyoperitonium, despite patient being afebrile and no history or investigation suggestive of sepsis. Intraoperatively, a large dermoid cyst of 20*15cm was present on left side, twisted with 2.5 turns over left fallopian tube, and ruptured at one end. About 300 ml of sebaceous material was removed from the abdominal cavity (Image 1). Fine adhesions were present between dermoid cyst, fallopian tubes and anterior uterine wall extending upto utero-vesical fold. Adhesiolysis was done and the anatomy was restored. Left

dermoid cystectomy was done and remaining healthy ovarian tissue was left behind. Right tube and ovary was normal. Peritoneal lavage was done and abdomen was closed. Postoperative period was uneventful. The patient was discharged on post op day 5.

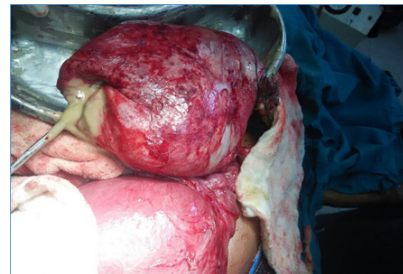


Image 1- showing uterus with left sided twisted fallopian tube and large dermoid cyst with hair and sebaceous material.

DISCUSSION

Mature cystic teratoma (dermoid cyst) is one of the most common benign ovarian neoplasms discovered during pregnancy (24–40%) [1, 2]. It may be responsible for complications such as torsion, rupture and obstruction during labour. The word teratoma is derived from the Greek word *teraton*, meaning monster, and was used initially by Virchow in the first edition of his book on tumours, which was published in 1863 [2]. Benign cystic teratoma (BCT) is the most common benign ovarian neoplasm comprising 10–15% of all ovarian tumours. It occurs at all stages of life, the majority of cases being diagnosed between 20 and 30 years of age [3]. This fact makes it the most common tumour during pregnancy (22–40% of all ovarian tumours). In pregnancy, the risk of complications increases significantly including rupture, torsion, infection and malignant degeneration.

The risk of ovarian torsion rises by 5 fold during pregnancy, with incidence of 5 per 10,000 pregnancies [4]. Ovarian torsion is the total or partial rotation of the adnexa around its vascular axis. Unlike in our patient, ovarian torsion occurs more often in the right adnexa, presumably because the sigmoid colon limits the mobility of the left ovary. [5]

Auto amputation of ovary may rarely occur following torsion of dermoid cysts and it may be more commonly implanted on the greater omentum. [6]. A very rare complication of

ruptured dermoid cysts is granulomatous peritonitis [7], as seen in our case. Another rare but ominous complication of mature cystic teratomas is malignant transformation. Yen et al. reported a case of squamous cell carcinoma developed from a dermoid cyst during pregnancy [8].

The gold standard to determine an ovarian tumor during pregnancy is ultrasound, but it has a lower specificity in the diagnosis of pelvic malignancy. Pelvic magnetic resonance imaging (MRI) is a suitable choice in the diagnosis of ovarian tumors during pregnancy that gives more information compared to ultrasound. Ultrasound-guided aspiration of ovarian tumors is not recommended during pregnancy [9].

Cysts less than 6 centimeters in diameter and appearing benign on ultrasound are generally treated conservatively. Cysts more than 10 centimeters in size are usually resected due to increased risk of malignancy, rupture or torsion. Management of cysts between 5 to 10 centimeters is controversial. If the cysts contain septae, nodules, papillary excrescences or solid components then resection is recommended. Those with simple cystic appearance may be managed expectantly with serial ultrasound surveillance. However, they may require emergency exploratory laparotomy for rupture, torsion or infarction in as many as 50% cases [8].

This is the first reported case of 24 years second gravida with previous one abortion, with ruptured dermoid cyst which presented with features of abruption placentae at 30 weeks leading to misdiagnosis. The cyst in our case was large, measuring 20*15 cm. There was no previous ultrasound available mentioning any ovarian cyst. The patient presented with bleeding per vaginam with tense abdomen, resulting from chemical peritonitis following rupture of the dermoid cyst. The diagnosis of rupture dermoid cyst was made only during laparotomy following the vaginal delivery of the live baby.

CONCLUSION

Ruptured dermoid cyst can present as preterm labour pains with features of abruption. Clinical suspicion and ultrasonography may help in establishing a diagnosis initiating an appropriate management. Laparotomy is generally required with complete removal of the cysts with prevention of the risk of tumor dissemination, thus reducing the risk of recurrence. Preservation of healthy ovarian tissue should be considered during the surgery of all benign ovarian tumors to prevent premature ovarian failure.

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