



A RESEARCH PAPER ON RIGHT OVARIAN MOLAR ECTOPIC PREGNANCY

Utsav B. Doodhat

Senior Resident, Department of Obstetrics and Gynaecology, Baroda Medical College.

ABSTRACT **Background:** Ectopic gestation is rare, with an incidence of 4.5-18 per 1,000 pregnancies. Hydatidiform moles, either complete or partial, are uncommon in ectopic pregnancies. This case highlights the importance of early diagnosis and histopathological examination in managing molar ectopic pregnancy. **Case Presentation:** A 28-year-old female presented with three months of amenorrhea, abdominal pain, and mild bleeding. Ultrasound revealed a right tubo-ovarian mass with a heterogeneously echo-textured lesion. Serum β -HCG levels were significantly elevated. Laparoscopy confirmed the mass, and histopathology diagnosed a molar ectopic pregnancy. Postoperative β -HCG levels declined appropriately, and the patient had an uneventful recovery. **Conclusion:** Molar ectopic pregnancy is a rare condition that requires histopathological confirmation for accurate diagnosis. Early detection and intervention can prevent complications such as invasive mole or choriocarcinoma.

KEYWORDS : Molar pregnancy, ectopic pregnancy, ovarian mass, histopathology, β -HCG

INTRODUCTION

Ectopic pregnancy occurs in approximately 4.5-18 per 1,000 pregnancies, with hydatidiform moles being extremely rare in extrauterine locations. The incidence of tubal ectopic hydatidiform moles is approximately 1.5 per 1,000,000 pregnancies. Molar changes in ectopic pregnancies can be partial or complete, requiring a combination of surgical intervention and β -HCG monitoring for treatment. However, ultrasound alone may not always be sufficient to diagnose molar ectopic pregnancy, necessitating histopathological evaluation for confirmation.

Molar changes could be either partial or complete and the treatment is surgical combined with chemotherapy. Follow-up is usually done by serial serum human chorionic gonadotropin (β -HCG) titrations. Although ultrasonography is useful in the diagnosis of uterine molar pregnancies, there is a chance of missing this diagnosis in cases of an ectopic molar pregnancy. The present case conveys the importance of histological examination of products of conception which helps the pathologist to provide an appropriate diagnosis, thereby the clinician can offer appropriate counselling and follow up to the patient.

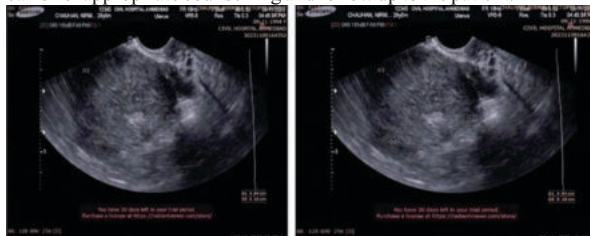


Fig 1&2. USG showing heterogeneously echo-textured lesion with multiple anechoic areas within giving bunch of grapes appearance with internal vascularity.

CASE STUDY

A 28Y/F G4P3AOL2 presented to emergency department with h/o 3 months of amenorrhea and c/o bleeding p/v and abdominal pain since 2 days, her LMP was on 21/07/2023 and past menstrual history was regular, moderate, painless. Obstetric history includes G4P3AOL2 - 3 full term normal deliveries which includes 2 live issues and last delivery was 1 year back; this child died after 9 days of life due to some kidney disease. Patient gives history of spotting p/v since 2 days. Urine pregnancy test was positive at home 1 month back. Blood investigations reveal hemoglobin of 9.8 g/dl. On examination patient was conscious and oriented. Vitals included spo2-98% on room air, pulse 110/min, Bp- 100/70 mmhg. On systemic examination- per abdomen- soft. Per speculum- spotting +. Per vaginal- Uterus anteverted/bulky/soft/ Right forniceal-3*4 cm firm, lesion with irregularities felt/ mild tenderness + / left fornix free and os admits tip of finger.

USG Pelvis reveal - Approx 45x52x54 mm sized heterogeneous echo-textured lesion with multiple anechoic areas within giving bunch of grapes appearance with internal vascularity is noted in the region of right adnexa. It shows low resistance vascular flow within (RI 0.4, PI 0.6). However, no e/o any fetal parts are noted. Right ovary is not seen

separately from the lesion. Uterus is anteverted, normal in size & echotexture. Endometrial cavity is empty ET = 3 mm. Left ovary and adnexa appear normal and no e/o free fluid in pelvis. Above Findings suggestive of Right Ectopic Molar pregnancy. On admission Beta HCG levels were 15789 mIU/ml. Decision was taken for laparoscopy. Per operatively Right tubo ovarian mass of approximately 5*4 cm was found along with blood clots which were removed. Right sided tubo-ovarian mass excised and specimen retrieved in endobag. Left side tubectomy done for sterilization, hemostasis was achieved. Rest post operative period was uneventful. After 48 hours Beta HCG was 2763 mIU/ml and 39.38 mIU/ml after one week.

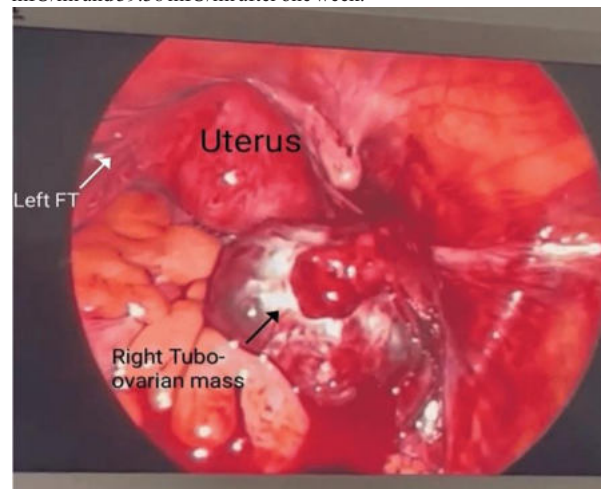


Fig 3. Showing uterus with left fallopian tube and right tub ovarian mass.

Histopathology reports - Right ovary show hydropic chorionic villi lined by syncytiotrophoblasts and cytotrophoblasts and large areas of hemorrhage. Sections from Right Fallopian tube - normal mucosa; Wall is fibro collagenous and shows few chorionic villi, decidua tissue, areas of hemorrhage, chronic inflammatory infiltrate and congested blood vessels. Section from left fallopian tube show normal histology. Conclusion- Right ovary and fallopian tube consistent with clinical diagnosis of ectopic molar pregnancy. On day 7 Suture removal was done and the patient was discharged.

DISCUSSION

Gestational trophoblastic disease (GTD) is a spectrum of abnormal proliferation of trophoblastic tissue associated with pregnancy. It is divided into molar tumors (complete and partial hydatidiform mole) and non-molar. Non molar tumors are called gestational trophoblastic neoplasia (GTN) and include invasive mole, choriocarcinoma and placental site trophoblastic tumor.

Hydatidiform moles occurs due to a placental malformation; due to genetic aberration of the villous trophoblast and is characterized by cystic swelling and trophoblastic proliferation. Molar gestation

commonly develops within the uterus but may also occur in sites of ectopic pregnancy. The chromosomal pattern in a complete mole is 46, XX with paternal genome origin. This is due to the fertilization of an empty ovum by a haploid spermatozoon, which later divides. Partial moles usually arise from Di spermic fertilization of a haploid ovum, resulting in a triploid genome. Clinically patients with hydatidiform mole complain of abdominal pain; some have vaginal bleeding. Ultrasonography in hydatidiform mole, a placental site trophoblastic tumor, and choriocarcinoma will be like heterogeneous, hypo-echoic, solid mass with cystic vascular spaces. In comparison with partial moles, complete mole is easily detectable. Hence, histopathological examination of products of conception remains the current gold standard for identification. Laparoscopy is the main mode of treatment in cases of ectopic pregnancy. Appropriate monitoring of β -HCG titers of suspected ectopic pregnancy is important. It helps to diagnose persistent ectopic gestation and to rule out the presence of malignant trophoblastic disease. However, one single undetectable HCG level after evacuation is sufficient. Ectopic pregnancy represents 2% of pregnancies, according to the Centers for Disease Control and Prevention. The risk of recurrence in those who have had a previous ectopic pregnancy reaches 10-27%. The risk of hydatidiform mole in subsequent pregnancies is known to increase in cases of previous hydatidiform mole. Recurrences occur in 1.3% to 2% of women who have had hydatidiform mole. Recurrences occur in 1.3% to 2% of women who have had hydatidiform mole and rise to 15% in women who have had two consecutive hydatidiform mole.

CONCLUSION

Molar ectopic pregnancy is a rare but clinically significant condition requiring early detection and histopathological confirmation. Ultrasound findings may not always be diagnostic, and persistent β -HCG elevation necessitates long-term follow-up to rule out gestational trophoblastic neoplasia. This case emphasizes the importance of multidisciplinary management, including gynecologists, pathologists, and oncologists, to optimize patient outcomes.

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