International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Mashruwala VM et al. Int J Reprod Contracept Obstet Gynecol. 2024 Sep;13(9):2558-2560
www.ijrcog.org
pISSN 2320-1770 | eISSN 2320-1789

DOI: https://dx.doi.org/10.18203/2320-1770.ijrcog20242524

Case Report

A case report on right ovarian molar ectopic pregnancy

Vishrut M. Mashruwala*, Amrita D. Patel, Maya Kumari

Department of Obstetrics and Gynaecology, B. J. Medical College, Ahmedabad, Gujarat, India

Received: 08 July 2024
Accepted: 08 August 2024

***Correspondence:**
Dr. Vishrut M. Mashruwala,
E-mail: mashruwalavishrut@gmail.com

ABSTRACT

Ectopic gestation has an incidence rate of 4.5-16.8/1000 pregnancies. Hydatidiform moles can be complete or incomplete and incidence is around 1-3/1000 pregnancies. Tubal ectopic hydatidiform moles are quiet rare lesions, and 132 cases have been reported in the world literature; 1.5/10,00,000 pregnancies. The present case conveys the importance of histological examination of products of conception which helps to provide an appropriate diagnosis, thereby the clinician can offer appropriate counselling and follow up to the patient.

Keywords: Ectopic pregnancy, Hydatidiform mole, Gestational trophoblastic disease, Ectopic molar pregnancy

INTRODUCTION

Ectopic pregnancies occur with an incidence of 4.5 to 16.8 per 1,000 pregnancies. Hydatidiform moles, which can be either complete or partial, occur at a rate of 1 to 3 per 1,000 pregnancies.[1] Tubal ectopic hydatidiform moles are exceedingly rare, with only 132 cases reported globally and an incidence rate of 1.5 per 1,000,000 pregnancies.[2] Their malignant potential is comparable to intrauterine molar pregnancies. Treatment typically involves surgery combined with chemotherapy, with follow-up monitoring through serial serum human chorionic gonadotropin (β-hCG) measurements. Although ultrasound is valuable in diagnosing uterine molar pregnancies, it may miss cases of ectopic molar pregnancies. This case highlights the critical role of histological examination of the products of conception, which enables pathologists to provide an accurate diagnosis and allows clinicians to offer appropriate counselling and follow-up care.

CASE REPORT

A 28Y/F G4P3A0L2 presented to emergency department with h/o 3 months of amenorrhea and c/o bleeding p/v and abdominal pain since 3 days, her LMP was on 29/08/2023 and past menstrual history was regular, moderate, painless. Obstetric history includes G4P3A0L2 - 3 full term normal deliveries which include 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, 3 days. Urine pregnancy test was positive at home 1 month back. Blood investigations reveal haemoglobin of 12.9 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-spottingp/v+. Per vaginal-uterus anteverted/bulky/soft/Right forniceal 5×5 cm firm lesion with irregularities felt/mild tenderness+/left fornix free and os admits tip of finger. USG Pelvis reveal approx 49×51×53 mm sized heterogenous 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 and 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 12689 mIU/ml. Decision was taken for laparoscopy. Per operatively Right tubo-ovarian mass of approximately 6*6

cm was found along with blood clots which were removed. Right sided tubo-ovarian mass excised and specimen retrieved in endo bag. Left side tubectomy done for sterilisation, 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.

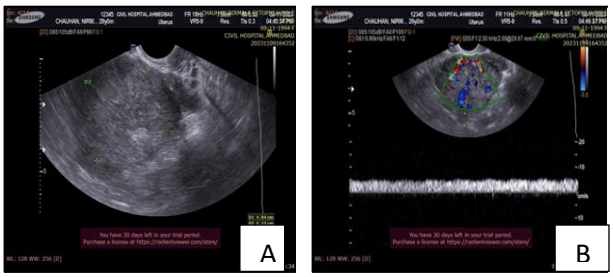

Figure 1 (A and B): USG showing heterogenously echotextured lesion with multiple anechoic areas within giving bunch of grapes appearance with internal vascularity.

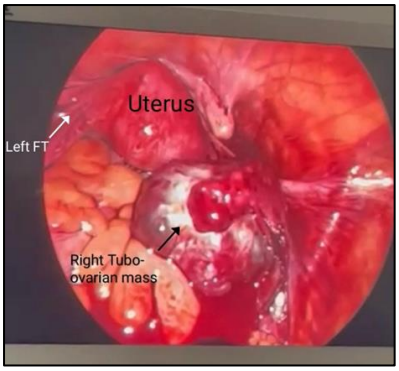

Figure 2: Uterus with left fallopian tube and right tuboovarian mass (laparoscopic view).

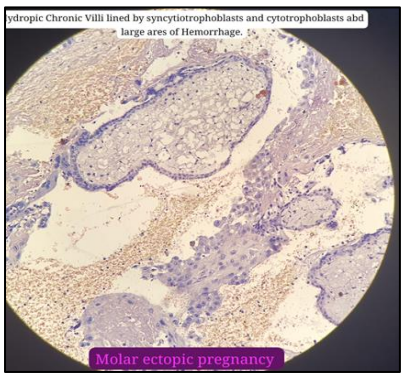

Figure 3: HPE with hydropic chorionic villi lined by syncytiotrophoblast and cytotrophoblast and large hemorrhages.

Right ovary shows 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, decidual tissue, areas of hemorrhage, chronic inflammatory infiltrate and congested blood vessels. Section from left fallopian tube show normal histology. 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) encompasses a range of abnormal trophoblastic tissue growths related to pregnancy. It is classified into molar tumors (complete and partial hydatidiform moles) and non-molar tumors. Non-molar tumors, termed gestational trophoblastic neoplasia (GTN), include invasive moles, choriocarcinoma, and placental site trophoblastic tumors. Hydatidiform moles, occurring in 1-3 per 1,000 pregnancies, are characterized by cystic swelling and trophoblastic overgrowth due to placental malformation from genetic anomalies of the villous trophoblast.[1] Tubal ectopic hydatidiform moles are extremely rare, with only 132 cases documented worldwide, corresponding to an incidence of 1.5 per 1,000,000 pregnancies.[2]

Risk factors for ectopic pregnancies include endometriosis, cesarean section, tubal surgery, pelvic inflammatory disease, smoking, fertility treatments, intrauterine devices, and variations in reproductive anatomy. Molar pregnancies are primarily influenced by a history of GTD and advanced maternal age, and can follow any pregnancy type, including term pregnancies, abortions, molar gestations, or, rarely, tubal gestations.[3] Although typically developing within the uterus, molar gestation can also occur in ectopic pregnancy sites.[4] Burton et al. found tubal ectopic hydatidiform moles to be extremely rare in a ten-year study. These moles stem from abnormal fertilization, complete moles typically have a 46, XX chromosomal pattern of paternal origin, caused by the fertilization of an empty ovum by a haploid sperm, which then duplicates. Partial moles usually result from dispermic fertilization of a haploid ovum, leading to a triploid genome.[5]

Clinically, patients with hydatidiform moles often report abdominal pain and sometimes vaginal bleeding. Ultrasound imaging of hydatidiform moles, placental site trophoblastic tumours, and choriocarcinomas shows a heterogeneous, hypoechoic solid mass with cystic and vascular spaces.[6] Complete moles are more easily identified compared to partial moles, making histopathological examination of conception products the diagnostic gold standard. Differentiating partial moles, complete moles, and hydropic abortions histologically is challenging, but molar pregnancies should be diagnosed when there is circumferential trophoblastic proliferation, hydrops, scalloped villi, and stromal karyorrhexis. Flow cytometric DNA analysis can also aid in diagnosis.[7] Laparoscopy is the primary treatment for ectopic pregnancy, with Pasic et al. recommending salpingotomy

for most women.[8] Monitoring beta-hCG levels is crucial for diagnosing persistent ectopic pregnancy and excluding malignant trophoblastic disease, though a single undetectable hCG level post-evacuation is usually adequate.[9] According to the centers for disease control and prevention, ectopic pregnancies make up 2% of all pregnancies. One study found the incidence of ectopic pregnancies in pregnancies conceived through assisted reproductive technologies to be about 1.6%. The recurrence risk for those with a prior ectopic pregnancy range from 10% to 27%.[10]

The recurrence risk of ectopic pregnancy ranges from 10–27%. The likelihood of hydatidiform mole (HM) recurrence increases in subsequent pregnancies for those with a history of hydatidiform mole, with recurrences occurring in 1.3% to 2% of women with previous hydatidiform mole and up to 15% for those with two consecutive hydatidiform moles. Recurrent hydatidiform mole is generally of the complete type.[11]

CONCLUSION

Ectopic molar pregnancy is a rare condition that can develop anywhere within the pelvic cavity. It can lead to invasive moles or choriocarcinoma. While ultrasonography may not completely detect ectopic molar pregnancies, histopathological examination of the conception products remains the definitive diagnostic method.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Vaishnav V. A very rare case of heterotopic pregnancy in natural conception with ectopic pregnancy as partial mole. J Obstet Gynecol India. 2013;64(6):433-5.
2. Sebire NJ, Lindsay I, Fisher RA, Savage P, Seckl MJ. Overdiagnosis of complete and partial hydatidiform mole in tubal ectopic pregnancies. Int J Gynecol Pathol. 2005;24(3):260-64.
3. Ucisik-Keser F, Matta E, Fabrega M, Chandrasekhar C, Chua S. The many faces of ectopic pregnancies: demystifying the common and less common entities. Abdom Radio. 2020;46(3):1104-14.
4. Samaila MO, Adesiyun AG, Bifam C. Ruptured tubal hydatidiform mole. J Turkish-German Gynecol Assoc. 2009;10:172-4.
5. Burton JL, Lidbury EA, Gillespif AM, Tidy JA, Smith O, Lawry J, et al. Over-diagnosis of hydatidiform in early tubal ectopic pregnancy. Histopathology. 2001;38:320-1.
6. Sherer DM, Stimphil R, Hellman M. Transvaginal sonographic findings of isolated intramural uterine choriocarcinoma mimicking an interstitial pregnancy. J ultrasound Med. 2006;25:791-4.
7. Tanha FD. Molar Pregnancy Presents as Tubal Ectopic Pregnancy Royan. Institute International. JFS. 2011;4:184-6.
8. Pasic RP, Hammons G, Gardner JS, Hainer M. Laparoscopic treatment of cornual heterotopic pregnancy. J AM Assoc Gynecol Laparosc. 2000;9:372-5.
9. Rotas M, Khulpateea N, Binder D. Gestational choriocarcinoma arising from a cornual ectopic pregnancy: a case report and review of the literature. Arch Gynecol Obstet. 2007;276:645-47.
10. Petrini A, Spandorfer S. Int J Womens Health. 2020;12:597-600.
11. Salima S, Wibowo MH, Dewayani BM. Int J Womens Health. 2023;15:1239-44.

Cite this article as: Mashruwala VM, Patel AD, Kumari M. A case report on right ovarian molar ectopic pregnancy. Int J Reprod Contracept Obstet Gynecol 2024;13:2558-60.