

# Ectopic Molar Pregnancy Mimicking Choriocarcinoma

N Husain, S Mishra, Y Pradeep

## Citation

N Husain, S Mishra, Y Pradeep. *Ectopic Molar Pregnancy Mimicking Choriocarcinoma*. The Internet Journal of Gynecology and Obstetrics. 2008 Volume 12 Number 1.

## Abstract

Molar ectopic pregnancies are rare events. We present an unusual case in which a patient with irregular uterine hemorrhage in the presence of increasing serum beta-human chorionic gonadotropin levels had no placental tissue in uterine curetting. Sonography revealed a complex hypo-echoic lesion in the right adnexa. A preoperative diagnosis of tubal choriocarcinoma was considered and hysterectomy done. On gross examination, tube was partially ruptured, adherent to the myometrium and showed a vesicular friable lesion in the lumen of the right fallopian tube. This was confirmed using stringent histological criteria of circumferential trophoblastic proliferation, hydrops, scalloped villi, and stromal karyohexis to be a hydatidiform mole. Postoperatively beta hCG levels fell to normal within 5 weeks.

## INTRODUCTION

Partial or complete hydatidiform mole affects approximately 1 in 500 to 1000 pregnancies<sup>1</sup>. The median maternal age is 31 (range, 15-54) years and median gestational age is 10 (range, 5-27) weeks<sup>3</sup>. Tubal ectopic hydatidiform moles are rare lesions and only 40 cases have been reported in the world literature<sup>2</sup>. We report an unusual case of molar pregnancy in the right fallopian tube which presented as an adherent adnexal mass and was diagnosed on USG as a choriocarcinoma

## CASE REPORT

A 42-year old woman, gravida 2, Para 1, presented with mild bleeding per vaginum after three months of amenorrhea. On examination, the patient was in good general health and hemodynamically stable with soft non tender abdomen. Pregnancy kit test was positive. Pelvic sonography revealed a uterus devoid of an obvious gestational sac but revealed the presence of a complex hypo echoic lesion which was reported to be in the lower body and cervical area. Dilatation and curettage yielded a scant amount of endometrial tissue with no villi or trophoblastic tissue present at histopathologic assessment. Her beta-hCG levels were extremely elevated (114,048 mIU/ml by Monobind Elisa). Repeat transvaginal sonography revealed inhomogeneous myometrium with a hypo echoic shadow in the right adnexal region.

In the presence of rapidly increasing beta-hCG levels, a diagnosis of tubal choriocarcinoma was suspected clinically.

Additional investigations including lung radiographs revealed no abnormalities. Subsequently laprotomy and hysterectomy with bilateral salpingo-oophorectomy was performed and sent for histopathological examination.

Grossly uterus and cervix appeared normal with a dilated and engorged right fallopian tube. Cut surface of the tube revealed showed a dilated cavity filled with hemorrhagic friable growth with small grape like vesicles grossly invading into the surrounding myometrium.

Microscopic examination of the fallopian tube growth revealed vesicular edematous avascular placental villi with prominent cisternae formation and surrounding prominent pervillous trophoblastic proliferation. The lesion was seen extending into the smooth muscle lining and surrounding parametrial tissue.

A diagnosis of ectopic complete hydatidiform mole was reached. The case also showed a speedy recovery with rapid decline in beta-HCG levels decreasing to 5mIU/ml within a week post surgery.

### Figure 1

Fig 1: Microphotographs showing (a) circumferential trophoblastic proliferation, hydrops with scalloped villi (H&E x 125x digital magnification) and (b) stromal karyorhexis (H&E x 525 x digital magnification)

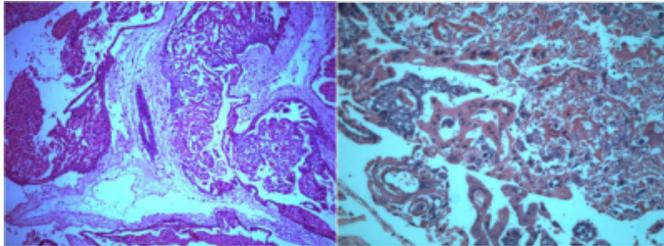


Fig 1a

Fig 1b

### DISCUSSION

Partial or complete hydatidiform mole affects approximately 1 in 500 to 1000 pregnancies<sup>1</sup>. The median maternal age is 31 (range, 15-54) years and median gestational age is 10 (range, 5-27) weeks<sup>3</sup>. Tubal ectopic hydatidiform moles are rare lesions and only 40 cases have been reported in the world literature<sup>2</sup>.

Sonographically, a hydatidiform mole, a placental site trophoblastic tumor, and choriocarcinoma typically exhibit a heterogeneous, hypo-echoic, solid mass with cystic vascular spaces. Fowler DJ et al (2006)<sup>3</sup> concluded after an extensive study that routine pre-evacuation ultrasound examination identifies less than 50% of hydatidiform moles. Moreover detection rates are higher for complete compared to partial moles, and improve after 14 week's gestation. Hence, histopathological examination of products of conception remains the current gold standard for identification. Transvaginal sonography has enabled early diagnosis of interstitial (corneal) pregnancies in which an ectopic gestation is located within the uterine myometrium, eccentric to the endometrial cavity<sup>4</sup>.

Burton JL et al<sup>2</sup> investigated the apparently high incidence of tubal ectopic hydatidiform moles in women for a period of ten years and concluded that tubal ectopic hydatidiform mole is a rare entity and demonstrated that it is over diagnosed.

Polar trophoblastic proliferation and hydropic villi are features of early placentation and of hydropic abortion<sup>2</sup>. Sheets of extra villous trophoblast may be particularly prominent in tubal ectopic gestation. Sebire NJ et al<sup>1</sup> also state that the pathologist should be aware that the degree of extravillous trophoblastic proliferation may appear more florid in ectopic gestation as compared with evacuated

uterine products of conception<sup>1</sup>. Hence, molar pregnancies should only be diagnosed when strict criteria regarding morphological abnormalities are met. These include circumferential trophoblastic proliferation, hydrops, scalloped villi, and stromal karyorhexis<sup>2</sup> (Fig 1 a, b). DNA flow-cytometric analysis may also be performed.

Cortes-Charry R et al in their study concluded that the prevalence of gestational trophoblastic disease (GTD) in ectopic pregnancy was 0.16:1000 deliveries which is high. It is important to apply strict morphologic criteria for GTD when a sample of ectopic pregnancy is analyzed and to monitor those patients with careful beta-hCG followup<sup>5</sup>. Galvez CR et al<sup>6</sup> state that choriocarcinoma associated with ectopic pregnancy, is extremely rare and in general very aggressive. Therefore histological examination of the tubes is mandatory in all ectopic pregnancies.

Laproscopy will remain the main method of treatment for women with ectopic pregnancy, as it provides obvious advantages over open surgery. Most cases have been treated with salpingectomy without complications, persistence or recurrences. However, Pasic RP et al<sup>7</sup> have advised that salpingotomy should be the surgical method of choice for the majority of women, as it results in a higher subsequent pregnancy rate, although there is a higher recurrent ectopic pregnancy rate and persistent trophoblastic disease rate when compared with women treated with salpingectomy<sup>7</sup>.

This case demonstrates the strict morphological criteria that should be met for diagnosis of hydatidiform mole in ectopic tubal pregnancy. Final diagnosis of gestational trophoblastic neoplasia in ectopic pregnancy is made by histopathological evaluation but in cases on medical management appropriate monitoring of beta-hCG titers following conservative management of suspected ectopic pregnancy is important, not only to diagnose persistent ectopic gestation, but also to rule out the presence of malignant trophoblastic disease.<sup>8</sup>

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**Author Information**

**Nuzhat Husain, MD**

Professor, Department of Pathology, CSM Medical University, Lucknow, India

**Sheenu Mishra, MD**

Ex JR III, Department of Pathology, CSM Medical University, Lucknow, India

**Yashodhra Pradeep, MD**

Professor, Department of Obstetrics and Gynecology, CSM Medical University, Lucknow, India