

# Ectopic Molar Pregnancy: A Case Report

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## Abstract:-

### ➤ *Introduction and Importance*

Ectopic pregnancy is defined as any pregnancy that implants outside the uterine cavity. Gestational trophoblastic disease (GTD) refers to a spectrum of interrelated but histologically distinct tumors originating from the placenta.

We will report here a case of Intra-ligamentary ectopic molar pregnancy. Left adnexectomy was done and pathologic examination confirmed ectopic with complete molar gestation.

In this article, an attempt was made to stress on the need for histopathological examination and follow-up of every case of ectopic pregnancy.

### ➤ *History and Clinical Findings*

25 years old female with two normal vaginal delivery came to our hospital on 16/6/2019, complaining of intermittent minimal vaginal bleeding for 6 months, during that time she had two times dilatation and curettage. there was a left adnexal mass with an empty uterus in Pelvic MRI.  $\beta$ -Human Chorionic Gonadotropin: 34745.33 mIU/ml.

### ➤ *Main Diagnose and Outcomes*

On admission, Laparotomy was done then left adnexectomy was done. The specimen was sent for histopathological examination and the results confirmed ectopic with complete molar gestation. Methotrexate was started due to the steadiness of  $\beta$ -Human Chorionic Gonadotropin but ultimately patient was diagnosed with gestational trophoblastic neoplasia and referred to another center outside of our country.

### ➤ *Conclusion*

Histopathological examination of products of conception remains the current gold standard for diagnosis. Post-molar surveillance is standard as there is a possibility of gestational trophoblastic neoplasia.

**Keywords:-** Ectopic, Molar, Pregnancy, Histopathology.

## I. INTRODUCTION

Ectopic pregnancy is defined as any pregnancy that implants outside the uterine cavity.

Gestational trophoblastic disease (GTD) refers to a spectrum of interrelated but histologically distinct tumors originating from the placenta. These diseases are characterized by a reliable tumor marker, which is the  $\beta$ -subunit of human chorionic gonadotropin ( $\beta$ -hcg.), and have varied tendencies for local invasion and spread.

Hydatidiform moles are abnormal pregnancies characterized histologically by aberrant changes within the placenta. Hydatidiform moles are categorized as either complete hydatidiform moles or partial hydatidiform moles (2).

The true incidence of Gestational Trophoblastic Disease developing outside the uterine cavity is very rare and approximates 1.5 per 1 million births. The incidence of ectopic pregnancy is 20 in 1000 (2). Hydatiform mole occurs 1 per 1000. Thus the incidence of ectopic molar pregnancy is very rare. Only 40 cases have been reported in the medical literature, and in many of these, accurate diagnosis is uncertain. We will report here a case of Intra-ligamentary ectopic molar pregnancy. Left adnexectomy was done and pathologic examination confirmed ectopic with complete molar gestation. Our objective is that Ectopic molar pregnancy is a rare occurrence and consequently not often considered as a diagnostic possibility. In this article, an attempt was made to stress on the need for histopathological examination and follow-up of every case of ectopic pregnancy

## II. CASE PRESENTATION

### A. *Patient Information*

25 years old female with two normal vaginal delivery came to our hospital on 16/6/2019, complaining of intermittent minimal vaginal bleeding for 6 months, during that time she had two times dilatation and curettage. She was not known about her last menstrual period. There was no significant medical, surgical, or family history, also there was no known drug history.

On physical examination, the patient body mass index was in a normal range and all vital signs were normal. On speculum examination, there is no bleeding from the cervix and other pelvic examinations are unpredictable. On transvaginal ultrasound, the uterus is mild large than normal and normal endometrium, but there was a 7x6cm left adnexal mass with marked hyper vascular around it. there was a left adnexal mass in the empty uterus in Pelvic MRI as Fig (1) Endometrium sampling was decidualized endometrium and negative for pathology Fig (2).  $\beta$ -Human Chorionic Gonadotropin: 34745.33 mIU/ml on admission, and Chest x-ray is normal.

**B. Diagnosis and Intervention**

On 17/6/2019 Laparotomy was done and the finding was ectopic gestation without a fetus in the left broad ligament inferior to the ovary, there was also dilated left fallopian tube although the cause was unknown then left adnexectomy was done including the left fallopian tube and left ovary due to its appearance(Inflamed), (Fig3), then layers were closed anatomically. After Specimen was sent to the pathology center, results confirmed ectopic with complete molar gestation (Fig 4).

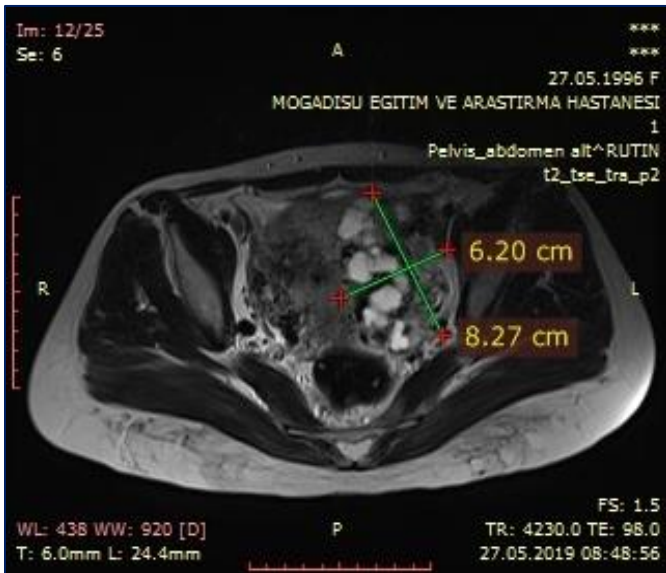


Fig1: left adnexal mass and empty uterus



Fig.3: Left adnexectomy (rounds ligament, dilated fallopian tube, round ligament, and some vesicles in the mass).

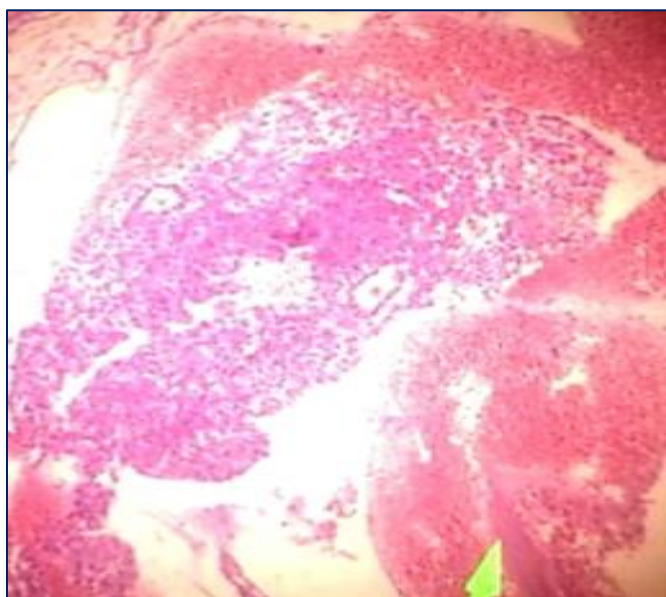


Fig.2 decidualized endometrium (H&E)

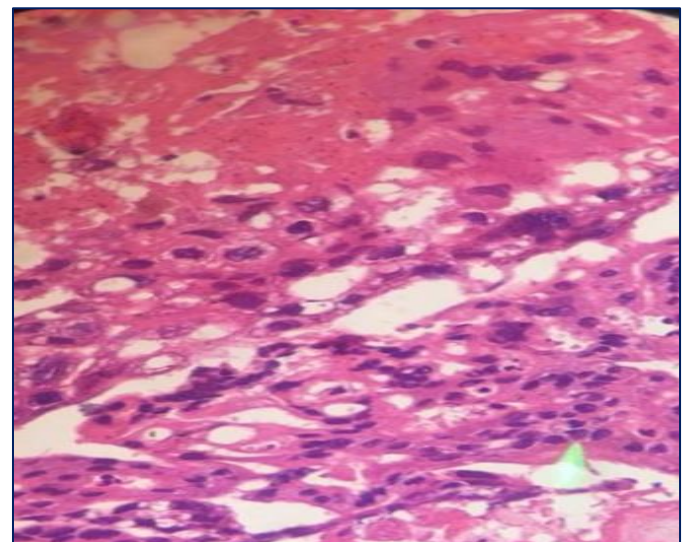


Fig. 4 Diffuse swelling of chronic villi and trophoblastic hyperplasia with no fetal tissues suggests complete molar gestation (H&E).

### C. Follow-up and Outcomes

$\beta$ -Human Chorionic Gonadotropin follow-up was done for six months, but ultimately patient was diagnosed with gestational trophoblastic neoplasia and referred to another center outside of our country.

### D. Patient Perspective:

Due to the development of persistent Gestational Trophoblastic Diseases patient was referred to a Gynecology center in another country.

## III. DISCUSSION

As ectopic pregnancy occurs in any place outside the uterine cavity, our case was the intraligamentary cavity (between two leaves of the broad ligament) in addition to a molar pregnancy, which makes the case rare or rarest. Clinically, tubal molar pregnancy mimics normal tubal ectopic pregnancy and, therefore, makes the diagnosis difficult (3).

However, a provisional diagnosis is made during surgery and histopathological examination can determine the final diagnosis. Molar changes may even be found in cervical pregnancies (3, 4). Molar changes can be detected by transvaginal color Doppler ultrasonography. Magnetic resonance imaging is also helpful in localizing the lesion.

Two theories have been proposed to explain the pathogenesis of broad ligament ectopic pregnancy. Kobak et al (5) explain the majority of intraligamentary pregnancies occur as a result of rupture of tubal pregnancy along the mesosalpingeal border with the secondary escape of implantation between two leaves of the broad ligament. Peterson and Grant (6) believe primary implantation within two leaves of the broad ligament.

The molar ectopic pregnancy shares common risk factors with normal ectopic gestation. Pelvic sonography cannot distinguish normal ectopic and molar ectopic gestation. Quantitative serum  $\beta$ -hCG is not elevated as in uterine molar in the uterus, even if they are in the lower range because the implantation site of the fallopian tube or intraligamentary pregnancy is not as vascularized as the uterus. So the only definitive diagnosis is a histopathologic examination of the specimen (7).

Postmolar surveillance with serial quantitative serum  $\beta$ -hCG levels is standard as gestational trophoblastic neoplasia can develop in about 15% of cases with complete mole. Of these  $\frac{3}{4}$  will progress into locally invasive molar and  $\frac{1}{4}$  will go.

Estimation of gestational Trophoblastic neoplasia following ectopic molar is not still known. Our case suggests the development of gestational trophoblastic neoplasia.

## IV. CONCLUSION

Clinical diagnosis of a molar pregnancy especially intraligamentary ectopic site is more difficult. Although ultrasonography and  $\beta$ -hCG are good for diagnosing there is an ectopic pregnancy, it has a limited role in identifying the molar pregnancy and there is more chance of missing it.

Histopathological examination of products of conception remains the most useful method to diagnosed Ectopic Molar Pregnancy. Post-molar surveillance is standard of any kind of ectopic pregnancy as there is a possibility of gestational trophoblastic neoplasia.

## LIMITATIONS

It is difficult to diagnose in this case as there is a shortage or limitation of histopathology availability and other important materials for diagnosis.

There are no Gynecology centers or doctors who would give the patient a high standard of care.

### Provenance and peer review:

Not commissioned, externally peer-reviewed.

### Consent:

Informed consent was obtained from the patient.

### Ethical approval:

Ethical approval was not needed for writing case reports in our setting

### Funding:

I did any no funding from any individual or institution, and this work is completely volunteer

### Research registration number

No registration number is available for our case reports.

### Credit authorship contribution statement:

Abdirahman Moallim involved in surgical therapy, study design, data acquisition, drafting, the article, revising it critically, and approval.

### Conflict of interest:

There is no conflict of interest regarding this case report

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