

## Case Report

### Ruptured Complete Hydatidiform Mole in the Fallopian Tube

*Mimi Gangopadhyay<sup>1</sup>, Arghya Bandyopadhyay<sup>1</sup>, Sailes Ray<sup>2</sup>, Pranati Bera<sup>1</sup>, Biswajit Dey<sup>3</sup>*

*1. Dept. of Pathology, North Bengal Medical College, West Bengal, India*

*2. Dept. of Gynecology & Obstetrics, North Bengal Medical College, West Bengal, India*

*3. Medica North Bengal Clinic, West Bengal, India*

#### ABSTRACT

Tubal pregnancies are common but presence of hydatidiform mole in tube is a rare entity. A woman of 53 years presented with acute abdomen, preoperative pregnancy test was positive and ultrasonography suspected the case as hydatidiform mole in right tube. The patient was treated with total abdominal hysterectomy with bilateral salpingo-oophorectomy as her family was completed. Subsequent histopathological examination showed ruptured complete hydatidiform mole in right tube. Postoperative period was uneventful with normalization of  $\beta$ -HCG titer within two weeks.

**Keywords:** Tubal pregnancy, Hydatidiform Moles, India

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#### Introduction

Molar pregnancy is an uncommon complication of pregnancy characterized by the presence of abnormal trophoblastic tissue proliferation and classified as partial, complete, and invasive categories (1, 2). Its occurrence in ruptured tubal pregnancy is even rarer and less than 50 cases have been reported in literature (3, 4). We report an extremely rare case of ruptured complete hydatidiform mole

(HM) in the fallopian tube.

#### Case report

A 42-year-old woman Para 2 gravida 4 presented complaining of severe lower abdominal pain. She had history of amenorrhea for 8 weeks and her urine pregnancy test was positive. On examination, she had pallor, rapid feeble pulse, and hypotension. Her abdomen was tense and tender. Bimanual

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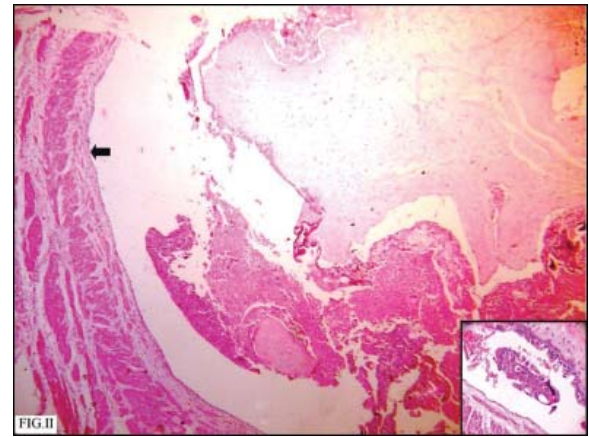
*Accepted: Address communications to: Dr. Arghya Bandyopadhyay, Department Of Pathology, North Bengal Medical College, Sushruta nagar, Darjeeling, West Bengal, India.*

*Email: drarghyabanerjee@yahoo.com*

examination was extremely painful and the size of the uterus could not be delineated. Ultrasonography showed typical snow burst appearance in the right fallopian tube along with massive amount of peritoneal fluid. Uterus was bulky but the cavity was empty. The patient immediately underwent laparotomy for suspected ectopic pregnancy. Multiple grape like vesicles were seen coming out from the ruptured right fallopian tube. Abdominal total hysterectomy and bilateral salpingo- oophorectomy was done owing to her perimenopausal age. Grossly the right tube was dilated and ruptured containing numerous vesicular masses which were 1-1.5 cm in diameter admixed with the blood clot (Fig.1). The uterine cavity was empty and left tube and ovary looked normal. Histopathological examination showed a ruptured and expanded tubal wall, hydropic chorionic villi of varying sizes, with central cistern formation and exhibiting circumferential trophoblastic proliferation (Fig.2). Therefore, a final diagnosis of complete hydatidiform mole was made. Postoperative human chorionic gonadotropin levels dropped rapidly and remained undetectable until 9 months follow up.



**Fig. 1-** Grossly right fallopian tube was dilated and ruptured containing multiple grape like vesicles. Uterine cavity was empty with left tube and ovary appeared normal



**Fig. 2-** Microphotograph showing complete hydatidiform mole with cavitation and circumferential trophoblastic proliferation adjacent to the tubal wall (arrow). ( $\times 40$ , H & E stain). Inset: Intermediate trophoblast with cytological atypia. ( $\times 400$ , H & E stain )

## Discussion

The preoperative diagnosis of HM in fallopian tube is difficult (5). The positive pregnancy test, mass in the fallopian tube along with typical radiological findings as in our case, should arouse suspicion. Gillespie AM *et al.* reviewed 5581 women with ectopic gestational trophoblastic disease and showed that only 0.1% (6 patients) had the disease. Out of these 3 were complete mole and 3 choriocarcinoma (6).

HM represents a malformation of the placenta due to genetic aberration of the villous trophoblast characterized by hydropic swelling and varying degree of trophoblastic proliferation (1-3).

The common age of presentation, vary in various reports ranging from 3<sup>rd</sup> to 4<sup>th</sup> decade, with a mean age of 28 years (7). Our patient was older with two previous normal deliveries and one spontaneous abortion.

Predisposing risk factors to development of tubal ectopic hydatidiform mole include multiparity, pelvic inflammatory disease, oral contraceptive, low socioeconomic status , prior HM and advanced or young maternal

age (7,8). Except advanced age, our patient did not have other risk factors.

Serial monitoring of  $\beta$ -HCG level of patients is done until it becomes normal, for 3 consecutive weeks, then monthly for 6 consecutive months to detect recurrence and early diagnosis of persistent gestational trophoblastic disease or choriocarcinoma. Our patient showed negative titer of  $\beta$ -HCG on 2<sup>nd</sup> weeks onwards.

Complete and partial moles are different in both macro and microscopic appearance. Complete mole has no fetal parts, hydropic change is present in all the villi, and trophoblastic proliferation is diffuse and circumferential. The frequency of choriocarcinoma is higher in complete mole (8), hence the need to keep the patient under regular follow up.

Histopathological criteria for diagnosis of ruptured tubal molar pregnancy are similar to that of complete mole where fetal parts are absent. Accurate diagnosis can be achieved by flow cytometry to determine ploidy (9). The presence of hydropic villi alone without circumferential trophoblastic proliferation is a feature of early placentation or hydropic abortus and should not be confused with molar gestation.

Most cases of tubal molar pregnancy have been treated with salpingectomy (10). In our case the patient's family was complete and she total abdominal hysterectomy with bilateral salpingo-oophorectomy .

## Conclusion

Ruptured tubal molar pregnancy is a surgical emergency. One should be aware of this rare entity and a provisional diagnosis can be made based on clinico radiological findings, which is to be confirmed by histopathology.

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The authors declare that they have no conflict of interest.

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