

Matastatic Gestational Choriocarcinoma of Ovary - A Rare Case Report

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Abstract: Gestational choriocarcinoma is a highly aggressive, malignant tumor derived from placental trophoblast. Which commonly occurs in women of reproductive age, rarely in post-menopausal women and in women under 20 years of age. Choriocarcinoma is a highly aggressive tumor and the main sites of metastasis from choriocarcinoma are lung, vagina, liver, gastrointestinal tract and kidneys, and the involvement of the ovaries is extremely rare. This is rare case of gestational choriocariocarcinoma of uterine corpus metastatic deposits in left ovary in a 18 year female patient.

Key Words: Gestational, Choriocarcinoma, metastasis, hydatidiform mole, ovar

1. INTRODUCTION

Choriocarcinoma, when untreated, is the most aggressive form of gestational trophoblastic disease. Most cases occur following a complete hydatidiform mole; consequently, this malignant tumor is more common in areas of the world in which hydatidiform mole is prevalent. It has been estimated that 1–2% of complete moles are followed by choriocarcinoma.^[1,2] Choriocarcinoma occurs with a frequency of 1 in 20,000 to 1 in 40,000 cases. In cases of choriocarcinoma following abortion – whether molar or not – the latent period is almost always less than 1 year, although it can be considerably longer ('latent choriocarcinoma').^[3] At the time of the diagnosis of the malignancy, the average age of the patient is 29 years. This disease is classified into two types in origin, gestational choriocarcinoma and non gestational germ cell tumor. Whether it is gestational or nongestational choriocarcinoma of ovary is very uncommon. Gestational choriocarcinoma is extremely rare, with an estimated incidence of 1 in 3.7×10^8 pregnancies.

I. CASE REPORT

A 18 year female patient presented with Abnormal uterine bleeding (AUB) along with history of molar pregnancy and very high levels of serum β -hCG (human chorionic gonadotropin hormone). In view of high clinical Suspicion the patient is operated for total abdominal hysterectomy along with

bilateral salpingo-oophorectomy (TAH+BSO) and send for histopathological examination.

On gross examination uterus with cervix measuring 9×9×5cms. External surface of uterus showing multiple nodules. On cut section no major abnormality was detected in the cervix and multiple polypoidal growths and few grey-brown areas are presented in uterus.

Among both ovaries one side ovary showing grey-white on cut section and other side ovary shows corpus Luteum (CL) and both the tubes are nil particular.

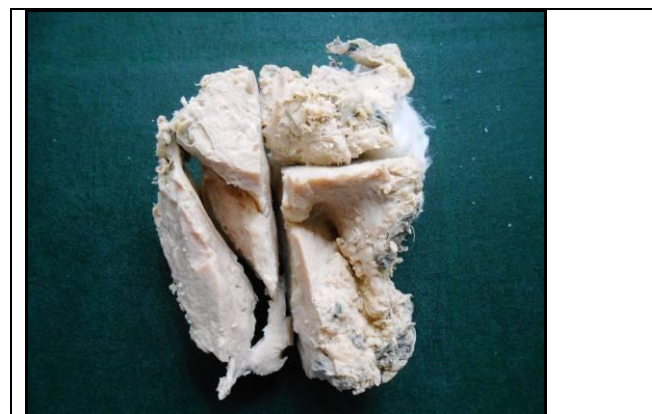


Figure 1: Gross show polypoidal growths and few grey-brown areas are presented in uterus and grey-

white areas are presented in one side ovary

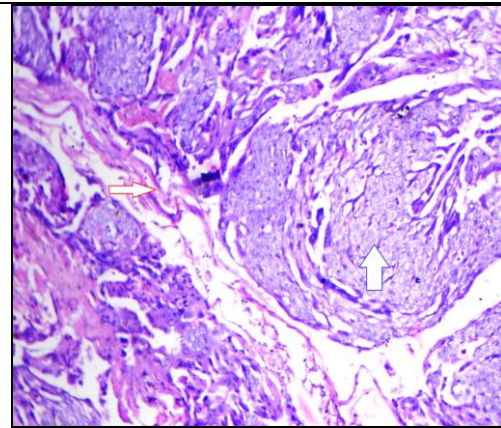


Figure 3 : Microscopic view of ovary - showing metastatic deposit (blue arrow) of choriocarcinoma along with ovarian stroma (red arrow).

On microscopic examination consists of an admixture of syncytiotrophoblast, cytotrophoblast and intermediate trophoblast as single cells and clusters of cells that invade surrounding tissue and permeate vascular spaces with prominent haemorrhage, necrosis. No chorionic villi was detected through out the sections (a typical feature of choriocarcinoma). Tumor cell are also presented in one side ovary (metastatic deposit).

Other side ovary shows corpus Latium (CL) and both the tubes are nil particular on microscopic examination. On microscopic examination no other any metastatic deposits except one side ovary.

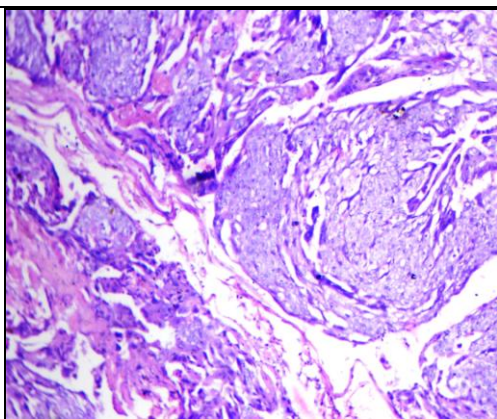


Figure 2 : Microscopic view of choriocarcinoma uterus - showing admixture of syncytiotrophoblast, cytotrophoblast and intermediate trophoblast proliferation.

II. DISCUSSION

Gestational choriocarcinoma is a highly malignant epithelial tumor arising from the trophoblast of any type of gestational event, most often a hydatidiform mole.^[1,2] Choriocarcinoma is for all practical purposes limited to reproductive age women but rare examples in postmenopausal women have been reported. It consists predominantly of a biphasic proliferation of mononucleate trophoblast and syncytiotrophoblast that morphologically recapitulates the primitive trophoblast of the previllous stage during placental development. Chorionic villi are not a component of this tumor with an exception of intraplacental choriocarcinoma. Most useful serum marker is high hCG. The natural history of untreated choriocarcinoma is characterized by the development of early hematogenous metastases, the most common sites being the lung, brain, liver, kidney, and bowel and the involvement of the ovaries is extremely rare.^[4,5,6,7]

Choriocarcinoma of the ovary may originate in three different ways: (1) as a primary gestational choriocarcinoma associated with ovarian pregnancy, (2) as metastatic choriocarcinoma from a primary gestational choriocarcinoma arising in other parts of the genital tract, mainly the uterus, and (3) as a germ cell tumor differentiating in the direction of trophoblastic structures, usually admixed with other neoplastic germ cell elements. In each case, it is important to ascertain the mode of origin of the tumor because this has important therapeutic and prognostic implications. Alternatively, choriocarcinoma of the ovary may be divided into two broad groups: (1) gestational choriocarcinoma encompassing the first

two groups mentioned and (2) non-gestational choriocarcinoma.

Gestational ovarian choriocarcinomas have better prognosis than their nongestational counterparts.^[8,9,10] Clinical symptoms are variety in gestational type, because choriocarcinoma is likely to metastasis to multiple organs but nongestational type predominant presenting symptom is lower abdominal pain. To differentiate gestational from nongestational tumors, it is necessary to determine whether a paternal contribution is present in genome of the tumor with DNA polymorphic analysis.

In conclusion origin of the tumor is important (gestational/nongestational) because this has therapeutic and prognostic implications; here presenting a rare case of gestational choriocarcinoma of ovary.

III. REFERENCES

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