

Gestational Choriocarcinoma in Recurrent Spontaneous Abortions: A Case Study

Dr.Nisha Kumari¹, Dr. Shashi Yashi², Dr.K.P SINHA³, Dr. Ratna Choudhary⁴

¹Post-graduate Student, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi.

²Post-graduate Student, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi.

³Professor, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi.

⁴Professor, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi.

Abstract:

Gestational choriocarcinoma may occur subsequent to a molar pregnancy (50% of instances), an abortion (25%), an ectopic pregnancy (2.5%), or a normal gestation (22.5%). We present a case of 37 year old woman who has unusual pregnancy related history. The patient had one normal pregnancy at age of 26 year after that she had recurrent loss of pregnancies. The last abortion was occurred 6 months back. The patient was come to gynecology department of RIMS Ranchi, with the complaint of vaginal bleeding. Then patient was admitted and advised for pelvic ultrasonography. Pelvic ultrasound reveled 68x62 mm mass located in the anterior fundal wall of corpus uteri. Marked elevation in the level of beta hCG level (301921mIU/mL). Her hemoglobin was 8gm/dl and other biochemical parameters were within normal limit. After preoperative investigation, the patient was undergone total hysterectomy with bilateral salpingoopherectomy. The specimen was received in histopathology section of Department of Pathology, RIMS Ranchi. On microscopic examination we diagnosed Gestational Choriocarcinoma.

Keywords: Gestational choriocarcinoma, recurrent Abortions.

Date of Submission: 25-02-2020

Date of Acceptance: 09-03-2020

I. Introduction:

Gestational choriocarcinoma may occur subsequent to a molar pregnancy (50% of instances), an abortion (25%), an ectopic pregnancy (2.5%), or a normal gestation (22.5%) [1].Choriocarcinoma is an aggressive malignant tumor comprised of sheets of anaplastic cytotrophoblast syncytiotrophoblast cells, arising in 1 in 20,000 25,000 pregnancies in Western countries [2]. Vaginal bleeding is the most common symptom of choriocarcinoma. [3]. 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”) [4]. At the time of the diagnosis of the malignancy, the average age of the patient is 29 years. Grossly, choriocarcinoma characteristically forms soft, dark red, hemorrhagic, round nodular tumor masses. Microscopically, the tumor is composed of clusters of cytotrophoblast separated by streaming masses of syncytiotrophoblast, resulting in a characteristic dimorphic plexiform pattern [5]. Here we present a case of 37 year old woman having history of recurrent abortions diagnosed as gestational choriocarcinoma in biopsy.

II. Case Report

A case of 37 year old woman who has unusual pregnancy related history. The patient had one normal pregnancy at age of 26 year after that she had recurrent loss of pregnancies. The last abortion was occurred 6months back. The patient was come to gynecology department of RIMS Ranchi, with the complaint of vaginal bleeding. Then patient was admitted and advised for pelvic Ultrasonography. Pelvic ultrasound reveled uterus is anteverted and measures 98mm in length. Endometrial thickness is 4 mm. 68x62 mm mass located in the anterior fundal wall of corpus uteri. Marked elevation in the level of beta hCG level (301921mIU/mL). Her hemoglobin was 8gm/dl and other biochemical parameters were within normal limit. After preoperative investigation, the patient was undergone total hysterectomy with bilateral salpingoopherectomy. The specimen was received to histopathology section of Department of Pathology, RIMS Ranchi. The endometrial specimens were received in 10% formalin solution. The received tissue specimen of uterus, cervix and bilateral adnexa. Uterus and cervix measure 10x8x7 cms. Endo - myometrial junction is not defined. A mass measuring 7x6 cms is occupied uterine cavity. Grossly mass appears black brown in color and soft in consistency with area of hemorrhages. The tissues were processed, sectioned and stained with hematoxylin and eosin. The slides were studied under light microscopy. On microscopic examination, the sections from tumor show malignant

trophoblast cells consisting of cytotrophoblast rimmed with syncytiotrophoblast with absence of chorionic villi. There is marked area of hemorrhages and necrosis. We diagnosed this case as a Gestational Choriocarcinoma.



Figure 1: Gross appearance of choriocarcinoma, showing mass in the endometrium with marked area of hemorrhages.

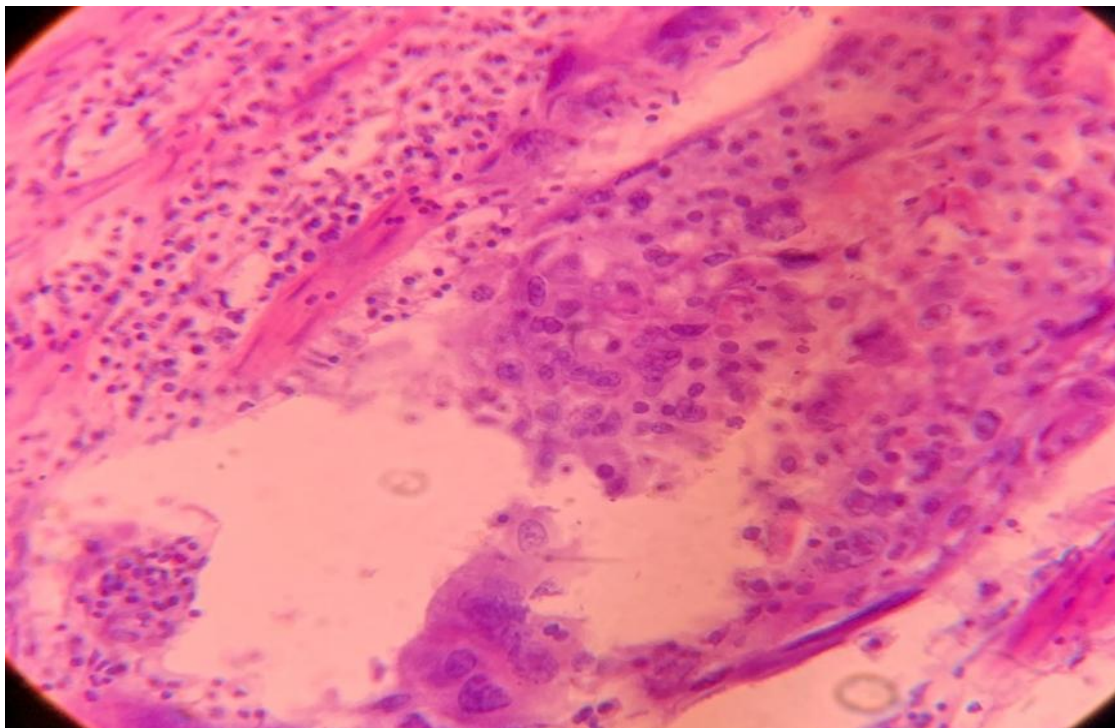


Figure 2: H&E 40: Choriocarcinoma, showing admixture of syncytiotrophoblast and cytotrophoblast

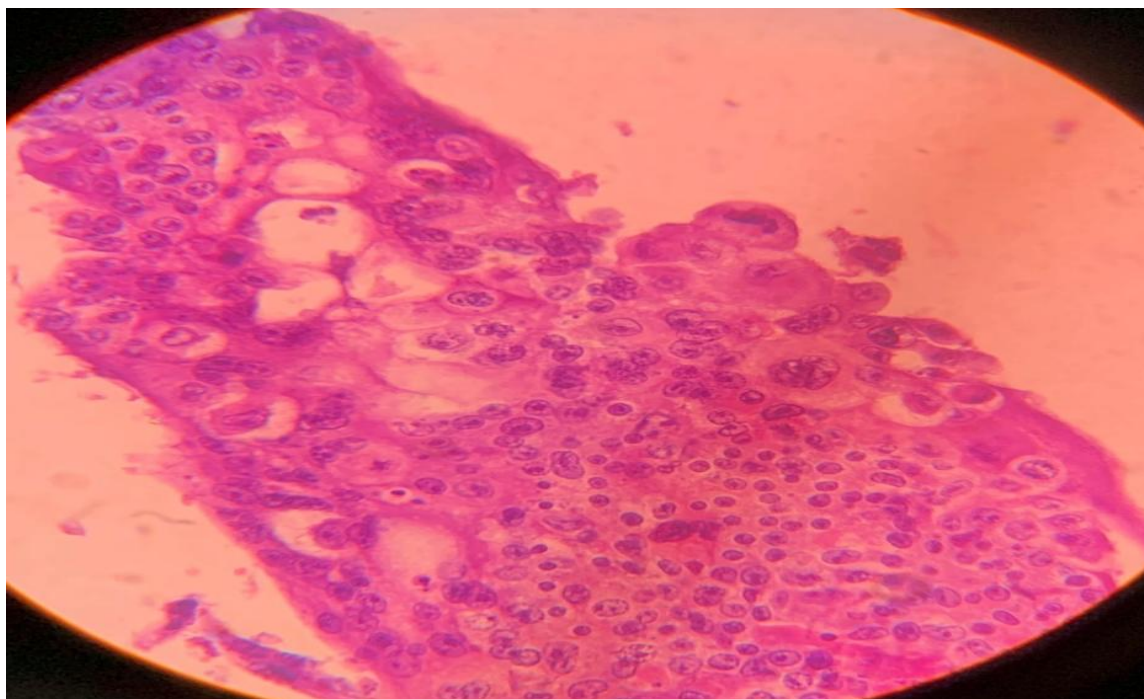


Figure 3: H&EX40, Choriocarcinoma, showing admixture of syncytiotrophoblast and cytotrophoblast

III. Discussion:

In younger women, the incidence of gestational trophoblast neoplasia is typically 5% following trophoblast disease [6]. Choriocarcinoma is generally observed in woman of a reproductive age within a year of an antecedent pregnancy, but can also be observed in postmenopausal woman in rare cases, following a long latent period from previous pregnancies. Desai et al. reported a choriocarcinoma case in a 73-year-old woman developing 38 years after pregnancy and 23 years after her final menstrual period [3].

The study done by Bariki L. Mchome et .al, they describe a patient who previously had history of choriocarcinoma and was treated with six courses of combination chemotherapy and was not followed up consistently and 14 months later conceived and delivered a live 1.3 kg female baby at 31 weeks of gestation. Two weeks post-delivery she was diagnosed with ruptured uterus. Long term complication following choriocarcinoma is a rare event.

Moreover, coexistence of choriocarcinoma with normal pregnancy and a subsequent ruptured uterus two week after delivery constitutes an atypical presentation.

The study done by Vo Minh Tuan et.al, they concluded that Choriocarcinoma on live pregnancy is a rare disease. Diagnosis is often difficult if genetic and histopathologic testing is not available. Therefore, facing a case with abnormal bleeding during pregnancy, careful monitoring and assessment must be made. The most frequent symptom in uterine choriocarcinoma is abnormal vaginal bleeding. High B-HCG levels and immunohistochemical tests for B-HCG may also be indicative of choriocarcinoma. An early and correct diagnosis of choriocarcinoma is important because it is a chemosensitive tumor with a good prognosis even in advanced stages [9].

An accurate, early diagnosis and treatment are important because the choriocarcinoma is considered the most curable gynecological cancer. Chemotherapy may occasionally cause fatalities due to treatment-related complications.

References:

- [1]. Hertig A T, Mansell H 1956 Tumors of the female sex organs. I. Hydatidiform mole and choriocarcinoma. In: Atlas of tumor pathology, section 9, series I, fascicle 33. Armed Forces Institute of Pathology, Washington, DC.
- [2]. O'Neill CJ, Houghton F, Clarke J, Mc Cluggage WG. Uterine gestational choriocarcinoma developing after a long latent period in a postmenopausal woman: the value of DNA polymorphism studies. *Int J Surg Pathol.* 2008;16(2):226-229.
- [3]. Desai NR, Gupta S, Said R, Desai P, Dai Q. Choriocarcinoma in a 73-year-old woman: a case report and review of the literature. *J Med Case Rep.* 2010;4:379.
- [4]. Dyke PC, Fink LM. Latent choriocarcinoma. *Cancer.* 1967;20:150-154.
- [5]. Redline RW, Abdul-Karim FW. Pathology of gestational trophoblastic disease. *Semin Oncol.* 1995;22:96-108.
- [6]. Chittenden B, Ahamed E, Maheshwari A. Choriocarcinoma in a postmenopausal woman. *Obstet Gynecol.* 2009;114(2 Pt 2):462-465

- [7]. Bariki L. Mchome 1, Gileard G. Masenga1 And Peyton Taylor2 **A recurrent gestational choriocarcinoma case complicated by a silent postpartum ruptured uterus: a unique presentation** Tanzania Journal of Health Research Doi: <http://dx.doi.org/10.4314/thrb.v20i2.11> Volume 20, Number 2, April 2018
- [8]. Vo Minh Tuan, Nguyen Thanh Hung. Choriocarcinoma on Live Pregnancy: Case Study. *Gynecol Reprod Health*. 2018; 2(6): 1-3.
- [9]. Lurain JR. High-risk metastatic gestational trophoblastic tumors. Current management. *J Reprod Med*. 1994;39(3):217-222.

Dr.Nisha Kumari,etal. “Gestational Choriocarcinoma in Recurrent Spontaneous Abortions: A Case Study.” *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 19(3), 2020, pp. 18-21.