Kathmandu University Medical Journal (2007), Vol. 5, No. 3, Issue 19, 412-413

*Case Note*

# High risk nonmetastatic persistent gestational trophoblastic tumour following an abortion

**Pandey S[1], Shrestha NS[2], Thapa M[3]**
[1]Medical Officer,[2,3] Lecturer, Department of Obstetrics & Gynaecology, Kathmandu Medical College, Sinamangal, Kathmandu.

**Abstract**
Locally invasive non-metastatic persistent gestational trophoblastic tumours (PGTT) following a non-molar pregnancy occur very rarely. Non-metastatic tumours usually falls in low risk group in WHO scoring system based on prognostic factors. We report a case of high risk non-metastatic PGTT which followed a spontaneous first trimester abortion. Complete remission of the tumour was achieved by chemotherapy EMA-CO regimen.

**Key words:** Persistent gestational trophoblastic tumour, Abortion, Chemotherapy

Persistent gestational trophoblastic tumours (PGTT) are unique conditions and represent the conditions like choriocarcinoma, invasive mole and placental site trophoblastic tumour. Any of these may follow molar pregnancy, normal pregnancy or develop after abortion and even ectopic pregnancy[1]. A persistent GTT is usually highly sensitive to chemotherapy and completely curable even in the presence of widespread metastasis [2,3].Here we report a case of nonmetastatic PGTT following an abortion treated with chemotherapy EMA-CO regimen.

**Case report**

A 21 year P1+1 mother of 2 yrs old female child presented to emergency room with complaints of irregular vaginal bleeding for 1 year which had become excessive for past 2 months. She gave a history of spontaneous abortion at 10 wks of gestation, which was managed by evacuation of uterus at Janakpur hospital one and a half year ago. She developed irregular vaginal bleeding following evacuation of uterus. Dilatation and curettage was done and repeated twice as the irregular per vaginal bleeding persisted. Histopathological examination was not done on any occasion. She was brought to KMCTH as her per vaginal bleeding got worse. At KMCTH, on examination- her general condition was poor, she was pale and febrile. On abdominal examination an irregular firm mass corresponding to 22wks of gestation with restricted mobility was palpable. Per speculum examination showed normal looking cervix with bleeding .Per vaginal examination revealed enlarged uterus of 22 wks size with bilateral tender fornices. Her investigations showed- Hb-8.2gm%. USG abdomen and pelvis showed bulky uterus with fibroid measuring 5.5 ×4.3cm with cystic space. Other routine blood & urine tests were within normal limits.

After transfusing 2 units of whole blood, laparotomy was done with plan of myomectomy. At laparotomy-haemoperitoneum of 50ml with 12-14wks size with necrotic growth over the fundus of uterus with omentum adhered to the bladder and active bleeding from the growth was noticed. With these findings provisional diagnosis of PGTD was made. Bleeding from the growth was managed by putting few haemostatic sutures over the fundus and abdomen was closed. Her urinary and serum BhCG estimation showed elevated serum BhCG>1500IU/ml and urinary HCG 128,00IU.The diagnosis PGTT was supported by elevated BhCG. Metastasis work up showed no evidence of metastasis. She fell into high-risk group with score>8 according to WHO prognostic scoring system.

She was put on chemotherapy EMA-CO regimen. After 7 cycles of EMA-CO regimen her serum BhCG came down to normal .3 more cycles were given. Following that USG abdomen & pelvis showed complete disappearance of the mass. No serious side effects of the chemotherapy were noticed during the treatment. She got discharged from the hospital after 7months of admission. She was advised for follow up every 2weeks for 3 months, monthly for 3months, 3monthly for 2years and yearly after that. She was advised to plan pregnancy only after 2 yrs.

**Correspondence**
Dr. Sirin Pandey
Email- shirin_555@hotmail.com

**Discussion**

Traditional epidemiological data suggests that 50% of PGTT follows: molar pregnancy,25% follows normal pregnancy and 25% follows abortion[4.]

After molar evacuation a PGTT may have histological features of H. mole or choriocarcinoma. After non-molar pregnancy however a PGTT always has the histological pattern of choriocarcioma, which is characterized by sheets of anaplastic cytotrophoblast and syncytiotrophoblast without chorionic villi. When a PGTT develops tissue is not often obtained and a precise histopathlogical diagnosis therefore is not always possible. The diagnosis is usually based therefore on rising hCG or plateau in the level that persists for 3 consecutive weeks as well as clinical and radiological features[5].

PGTT may be non-metastatic or metastatic. Non-metastatic locally invasive disease known as invasive mole develops in 20% of patient after complete molar pregnancy and 2-4% after a partial molar pregnancy and very rarely after normal delivery or abortion[6.] Metastatic disease develops in about 4% of patient after a complete hydatidiform mole but develops more commonly after a non molar pregnancy[2]. For the management and prognosis purpose a patient is considered to have high risk group if the WHO prognostic score is more than 7, middle risk group if score is 5-7 and low risk if the score is 4 or less[1]. Patients with non metastatic disease very rarely fall into high risk group but those with metastatic disease invariably have high risk score[5].This case although followed an abortion was locally invasive, non-metastatic type and fell into high risk category requiring multiple agent chemotherapy EMA-CO. The factors which made this non-metastatic disease a high risk disease are large tumour burden, protracted delay in diagnosis and non molar antecedent pregnancy.

**Conclusion**

Persistent GTT are life-threatening conditions, which rarely can occur even following an abortion but complete remission can be obtained with appropriate chemotherapy. Delayed diagnosis can worsen prognosis by putting even non-metastatic disease into a high-risk category. So for better prognosis of disease early diagnosis of the condition is very important, which can be achieved by testing of urine for pregnancy test in women with abnormal uterine bleeding.

**References**


1. Berkowitz RS,Goldstain DP.Gestational Trophoblastic disease.In:Jonathan S.Berek,Eli Y. Adashi,Paula A. Hillard,eds. Novak's Gynecology 12th ed.Williams &Wilkins,1996:1261-1282.
2. Berkowitz RS, Goldstain DP.The management of molar pregnancy and gestational trophoblastic tumors.In: Knapp RC, Berkowitz RS, eds.Gynaecologic oncology.2nd ed.New York: McGraw-Hill, 1993:328-38.
3. Bagshawe KD.Risks and prognostic factors in trophoblastic neoplasia.Cancer 1976; 38:1373-85.
4. Williams Obstetrics-Disease and Abnormalities of the Placenta.eds. FG Cunningham,NF Gant,KJ Levono,LC Gilstrap,JC Hauth,KD Wenstrom-21st edition,McGraw-hill, 2001;827-851
5. Berkowitz RS, Goldstain DP.Chorionic Tumors.NEJM 1996 ;( 23), 335:1740-1748.
6. Curry SL,Hammond CB,Tyrey L,Creasman WT,Parker RT.Hydatidiform mole:diagnosis,management,and long term follow up of 347 patients.Obstet Gynecol 1975;45:1-8.