Choriocarcinoma in Post-menopausal women-3 case reports and review of literature

Roma Jethani, Debabrata Barmon, Sharda Patra, Upasana Baruah
Dr B Borooah Cancer Institute

INTRODUCTION

•Gestational Trophoblastic Disease(GTD), developing due to abnormal proliferation of trophoblastic tissue, is a common condition seen in reproductive age wome

• Two distinct entities, benign-Partial mole, Complete mole and Maligant-Gestational trophoblastic neoplasm(GTN)-4 variants-Choriocarcinoma, Invasive mole, Placental Site Trophoblastic Tumor(PSTT)/Epithelioid Trophoblastic Tumor(ETT).

•Highly metastatic with excellent response to chemotherapy are the two unique features of choriocarcinoma.

•The occurrence of GTD in post-menopausal women is rare. Thus, we are reporting a case of Metastatic Choriocarcinoma in a Post-menopausal women presenting with Post-menopausal bleeding.

REFRENCES

1.Seckl MJ, Sebire NJ, Fisher RA, Golfier F, Massuger L, Sessa C, ESMO Guidelines Working Group. Gestational trophoblastic disease: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Annals of oncology. 2013 Sep 1;24(suppl_6):vi39-50.
2. 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. Journal of medical case reports. 2010 Dec;4(1):379.0
3. O'Neill CJ, Houghton F, Clarke J, McCluggage 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, 16:226-229
4. Rafanan LF, Greenberg H, Rondeau NU, Mulla ZD, Boman DA. Primary choriocarcinoma in postmenopausal women: Two case reports and review of the Texas Cancer Registry. Gynecologic oncology reports. 2017 Nov;22:69.

CASE REPORT

Case 1- 52 years old, P8L4A3 post-menopausal lady presented with complaints of pain abdomen and post-menopausal bleeding, she had her last menstrual period 1.5years back. Patient had a spontaneous abortion 4years back for which Dilatation and evacuation was done. Patient had no significant past medical or surgical history. On abdominal examination uterus was 14-16 weeks size. On pelvic examination no pelvic metastasis was detected. Initial serum beta- hCG was 1,46,000 mIU/ml.

CECT abdomen revealed diffusely enhanced uterus showing ill-defined soft tissue mass(fig 1) Multiple small ill-defined lytic lesions at multiple dorso-lumbar vertebral bodies. Computed Tomography of thorax revealed multiple confluent nodular lesion in both lungs-secondary deposits(fig 2). Magnetic Resonance Imaging of Brain showed no abnormality.

In view of above findings a provisional diagnosis of High risk (FIGO score- 12)[1] Gestational Trophoblastic Neoplasm (Choriocarcinoma) made and patient started on Multi-agent chemotherapy. Patient developed severe Grade III hematological toxicity leading to sepsis. She died while on first cycle of EMACO.

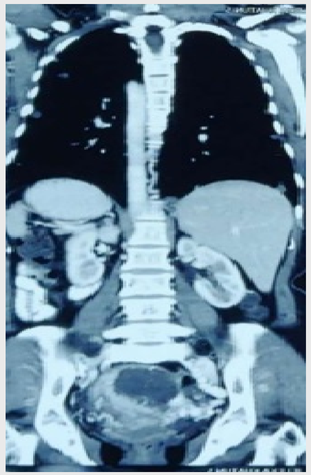

Fig 1: CECT of Pelvis

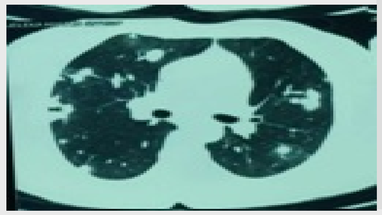

Fig 2: CECT of Thorax

Case 2- 42 years, P2L2, presented with postmenopausal bleeding since 2 months. Patient had history of choriocarcinoma 20 years back which was treated with Actinomycin D following which patient conceived spontaneously. On abdominal examination uterus was 14 weeks size. Endometrial biopsy showed features of choriocarcinoma. Initial serum beta- hCG was 13,142 mIU/ml. Chest Xray PA view was normal.

Based on above findings, patient was diagnosed as a case of High risk (FIGO score-11) Choriocarcinoma made and patient started on Multi-agent chemotherapy. After completing 6 cycles of EMA-CO patient's serum Beta-hCG was 4.47 mIU/ml. Patient received 2 more cycles of consolidation chemotherapy and is on regular follow-up.

Case 3. 47years, P 4L4, presented with post-menopausal bleeding since 4 months. Patient attained menopause 3years aback and her last child birth was 12years back. Patient underwent hysterectomy with bilateral sapingo-oophorectomy which showed features of choriocarcinoma of uterus on histopathological examination. Initial serum beta- hCG was 75,500 mIU/ml. CECT abdomen revealed 2 cysts in right lobe of liver (non-infiltrating) with no abnormality in the pelvis. CECT Thorax showed small nodular metastatic nodules in bilateral lung fields.

Diagnosis of High-risk (FIGO score- 10) choriocarcinoma was made and patient was started on Multi-agent chemotherapy. Patient received 6cycles of chemotherapy followed by 2 cycles of consolidation chemotherapy after serum beta-hCG was <5mIU/ml.

S.No	Year of publication	Author	No. of cases	Age (years)	FIGO score	Chemotherapy	Surgery	Outcome
1.	1996	G Massenkeil[10]	1	58	14	EMACO	No	Expired
2.	2006	U Mukherjee[7]	1	54	9	EMACO	No	Expired
3.	2010	N. R. Desai[2]	1	73	12	EMAO	No	Alive
4.	2012	M S Even[8]	1	58	8	EMACO	Yes	Expired
5.	2014	Sunil K Samal[11]	1	52	11	EMACO	Yes	Alive
6.	2017	L F Rafanan[4]	2	50	11	EMACO	Yes	Expired
				51	9	EMACO	No	Alive
7.	2018	Gou N[9]	1	61	11	EMACO	No	Alive
8.	2021	Present study	3	52	12	EMACO	No	Expired
				42	11	EMACO	No	Alive
				47	10	EMACO	Yes	Alive

DISCUSSION

Choriocarcinoma accounts for rare gynaecological malignancies in the post-menopausal women. Typically, in reproductive-age women, however long latent periods have in women who are postmenopausal. Apart from vaginal bleeding, vaginal/uterine mass, Choriocarcinoma can present with non-specific symptoms of hemoptysis, nausea in post-menopausal women suggesting presence of metastatic disease.[1] The management is based on FIGO scoring:- low-risk disease(score0-6) is treated with single agent chemotherapy whereas for high-risk disease (score >/=7), multi-agent chemotherapy EMA/CO regimen(Etoposide, Methotrexate, Actinomycin D, Cyclophosphamide, Vincristine) is used.[1] **Only a few cases of post-menopausal choriocarcinoma have been reported in the literature [4] and most of them have poor prognosis.**

CONCLUSION

Choriocarcinoma is rare gynecological malignancy in the post-menopausal women.. There is high incidence of metastatic, recurrent disease and low tolerance to standard multi-agent chemotherapeutic drugs. Thus, it might be prudent to say that research is needed to deduce the reason for aggressive behavior of the tumor in older women also, new treatment guidelines need to be formulated to improvise the outcome.