Treatment of choriocarcinoma with aggressive chemoherapy: a case report

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Abstract

Choriocarcinoma is highly malignant trophoblastic tumour with a tendency for relapse and distant metastases but on the same hand a very chemosensitive tumour. We report a case of Choriocarcinoma with relapse which was cured using aggressive combination chemotherapy.

Key words *- Choriocarcinoma, EMA/CO regime, β-hCG*

Introduction

Gestational Trophoblastic Tumours (GTT) arises from the abnormal growth of placenta. It consists of Hydatidiform mole, Invasive mole, Choriocarcinoma and placental site trophoblastic tumours. [1]Among these Choriocarcinoma is a highly malignant tumour arising from the chorionic epithelium. It can rapidly spread to virtually anywhere in the body through hematogenous or lymphatic route. Most common site of metastases are lung, brain and Liver.[2] The treatment of the condition is a challenge as it presents in child-bearing age group with tendency to relapse often.Various chemotherapy regimen have been used including single drug regimen or multiple drug combination.

Case Report

A 24 year old female presented with molar pregnancy for which she underwent suction and evacuation. 2 weeks later, the histopathology report came out as choriocarcinoma. She was given single agent chemotherapy (Methotrexate) with leucovorin rescue. She was asymptomatic for approximately 6months and then she again presented with vaginal bleeding with high β-hCG level (1,00,000 mIU/ml). CT scan of abdomen and Pelvis showed 5.5*4.8cm heterogenous mass in Uterus (Fig 1). Scan of rest of the body ruled out any metastasis. Patient's risk statement was assessed using WHO scoring system [Table 1] and it came out to be 8. She was started on aggressive chemotherapy using multiple drug combination which consisted of Etoposide, Methotrexate, Doxorubicin, Cyclophosphamide & Vincristine [EMA/CO Regimen].Her β-hCG levels (after two cycles of chemotherapy)was 247mIU/ml.

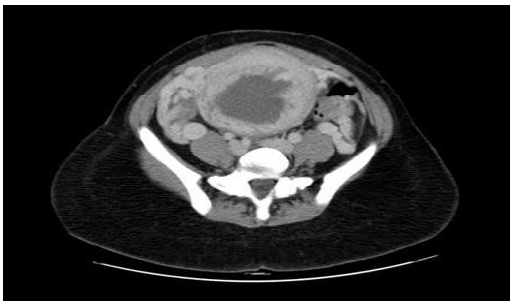

Figure 1: CT scan showing malignant mass in uterus

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Table 1: WHO Prognostic Scoring

Prognostic factor	0	1	2	4
Age	<39	>=39	.	.
Prior pregnancy	mole	abortion	term	.
Interval	<4 mo	4-6 mo	7-12 mo	>12 mo
B-HCG	<1,000	<10,000	<100,000	>100,000
ABO blood group	.	OxA or AxO	B or AB	.
Size of largest tumor	.	3-5cm	>5cm	.
Site of metastases	.	spleen,kidney	GI,liver	brain
Number of metastases	.	1-4	4-8	>8
Prior chemotherapy	.	.	single agent	two or more

Patient received 6 cycles of chemotherapy following which her β-hCG levels were 0.9mIU/ml. Currently patient is on follow up for last 18 months without any evidence of disease including normal β-hCG level.

Discussion

Often hydatidiform mole reoccur in form of choriocarcinoma with an incidence as high as 18%.[4] Chemotherapy is treatment of choice as choriocarcinoma is very sensitive to chemotherapy. Choosing right treatment is often challenging as aggressive chemotherapy using combination chemotherapy has more side effects. It is advisable to categorise patients into low risk cases and high risk cases using WHO scoring system.[5] Low risk cases can be given single agent but aggressive treatment with combination chemotherapy often yields better result. Rustin GJ et al in his series of 25 patients with metastatic choriocarcinoma with brain involvement has shown that multimodality chemotherapy [EMA/CO] shows good response even in metastatic setting with 72% disease free survival rate.[6] In our case also, when on relapse, patient was started on chemotherapy [EMA/CO], she had better response with disease free survival of 18 months till date.

Conclusion

Choriocarcinoma is highly malignant tumour with tendency for relapse as well as metastasis. Still it is very chemo sensitive and can be taken care by using appropriate chemotherapy after assessment of risk factors.

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