

# Case Report of Successful Pregnancy Outcome Following Chemotherapy for Choriocarcinoma

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**Abstract:** Choriocarcinoma is a rare aggressive malignant tumor from trophoblastic cell of placenta. The incidence of choriocarcinoma is 1: 60, 000 to 1: 70, 000 pregnancies. Histopathology shows hypervascular tumor containing sheets of malignant cytotrophoblast and syncytiotrophoblast. This tumor produces large amount of  $\beta$  hCG hence it's levels are dramatically increased. 1<sup>st</sup> line drug used is methotrexate. Thus here v present a case of successful pregnancy following chemotherapy for choriocarcinoma.

**Keywords:** choriocarcinoma, methotrexate, pregnancy, malignancy

## 1. Introduction

Choriocarcinoma is a rare spectrum of gestational trophoblastic disease (GTD). It is an aggressive malignant condition which are arising from the trophoblastic cells of the placenta. It is of 2 type Non gestational and Gestational. Non gestational is a subtype of germ cell tumour, which occurs in both male and female. It has a special character earlyspread to the lungs by blood stream. Histopathology shows hypervascular tumor containing sheets of malignant cytotrophoblast and syncytiotrophoblast. This tumor produces large amount of  $\beta$  hCG hence it's levels are dramatically increased. Mainly it occurs in the placental site, but very rarely it grows in other site also.

## 2. Case Report

A 32 years female P<sub>1</sub>, L<sub>1</sub>, A<sub>3</sub> weighing 52 kg, came with complaints of bleeding per vaginum for 35 days with h/o MTP done for missed abortion 2 month back. She had 1 full term LSCS and last child birth was 5 years and 2 first trimester spontaneous abortion at 6 weeks of gestation 3 years ago. 4<sup>th</sup> pregnancy was diagnosed as missed abortion for which MTP was done. On examination, She was pale with PR - 100/min and B. P. was 100/60 mm of Hg. On per abdominal examination, uterus was 12 - 14 weeks, size and tender. Per speculum examination shows moderate bleeding through os++ Per vaginal examination shows uterus 12 - 14 weeks size, soft with B/L forniceal mass of size 3 × 5 cm size, cystic in consistency non tender. On investigations her Hb was 7.6gm% with CBC - 10, 980/ccm, blood group AB+ve and hepatic, renal, thyroid function tests normal. USG showed uterus 13.3 × 7.9 × 8 cm in size with vesicles and B/L theca lutein cysts present. Her  $\beta$  hCG levels were 5, 50, 500 mIU/ml. Clinically she was diagnosed as GTD and planned for evacuation of the molar pregnancy with oxytocin drip. 3 pints PRBC transfused. HPE report revealed choriocarcinoma - a typical anaplastic syncytiotrophoblast and cytotrophoblast cell. Then to find metastasis X - ray chest and MRI brain and whole abdomen was done, which showed two nodular cannon ball like lesions in x ray chest - positive for lung metastases. The brain, pelvis and abdomen

were negative for metastatic lesions. Then the patient was stage 3 by FIGO staging and based on WHO prognostic scoring system, score was 6. Patient was started MAC - 3 regime 3 week once as Inj. Methotrexate—50 mg I. M. on day 1, 3, 5 and 7. Inj. Folinic Acid—0.4 mg I. M. on day 2, 4, 6 and 8 (24 h post MTX). Inj. Actinomycin - D—0.5 gm I. V. (12  $\mu$ g/kg) day 1–5. Inj. Cyclophosphamide—140 mg I. V. day 1–5. each cycle, Before starting each cycle, along with clinical examination,  $\beta$  hCG CBC, LFT, RFT X - ray chest and USG pelvis were done. Patient had a very good respond. At the end of 3<sup>th</sup> cycle  $\beta$  hCG dropped to 278  $\mu$ /ml. At the end of 5<sup>th</sup> cycle serum  $\beta$  hCG become undetectable levels. Chest X - ray was normal at the end of 5<sup>th</sup> cycle. 1 more cycles of MAC 3 regimen were administered to prevent relapse. Pt. was followed up weekly for 3 weeks and then monthly for 6 months. Consecutive  $\beta$  hCG levels were undetectable. hence she was asked to come for followup 2 monthly for next 6 months and 6 monthly for 2nd year. Patient was advised barrier contraception for 2 years. 2 years after post chemotherapy  $\beta$  hCG were undetectable and with no evidence of recurrence and metastasis. Contraception was also stopped. She conceived spontaneously within 1 years of contraception free period. All her antenatal scans and investigation were normal. Her antenatal period were uneventful. She delivered an alive term baby. Intrapartum and postnatal period was uneventful

## 3. Discussion

The incidence of choriocarcinoma is 1: 60, 000 to 1: 70, 000 pregnancies. It has a fair prognosis except for some high risk patients. It might be following complete mole, partial mole, spontaneous abortion, term pregnancies and ectopic pregnancy. 5 decade back, mortality rate of choriocarcinoma is 95% but with the effective chemotherapy and the most reliable tumor marker " $\beta$  hCG" the disease is 90–95 % curable. Methotrexate is the drug of choice for gestational choriocarcinoma. Methotrexate is always given with folinic acid to prevent folic acid deficiency. In gynecologic cancer combined chemotherapy is used to prevent resistance and toxicity of the drug. First line combined chemotherapy in choriocarcinoma is MAC regimen.

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This case shows the importance of MAC regimen instead of five drug EMACO regime which reduces both cost and toxicity of drugs. Follow up is the most important in management of the choriocarcinoma. Hence proper counseling regarding follow up is an essential part of managing choriocarcinoma.

#### **4. Conclusion**

Thus this study concludes that there will be a normal reproductive outcome as same as of general population in the patient with complete mole and persistent GTN. We can reassure the patients that they will have normal reproductive outcome who desire to conceive. In our patient MAC 3 regime not only proved a successful remedy but she could conceive within 1 year of contraception free period with a successful outcome.

#### **References**

- [1] Page RD, Kudelka AP, Freedman RS, et al. Gestational trophoblastic tumors. Medical oncology: a comprehensive review. Oncology. Houston: MD Anderson Cancer Centre; 2005.
- [2] Berkowitz RS, Goldstein DP, Bernstein MR. Ten year's experience with methotrexate and folinic acid as primary therapy for gestational trophoblastic disease. Gynaecol Oncol (Medline: 3002916) 1986; 23: 111–118. doi: 10.1016/0090 - 8258 (86) 90123 - X. [PubMed] [CrossRef] [Google Scholar]
- [3] Fulop V, Szigetvari I, Szepesi J, et al. Diagnosis and treatment of high risk metastatic gestational trophoblastic neoplasia in Hungary. J Reprod Med.2008; 53: 541–546. [PubMed] [Google Scholar]
- [4] Xue Y, Zhang J, Wu Tx, et al. Combination chemotherapy for high - risk gestational trophoblastic tumour. Cochrane Rev Abstract 2007. [PubMed]
- [5] Garrett LA, Garner EI, Feltmate CM, et al. Subsequent pregnancy outcome in patients with molar pregnancy and persistent gestational trophoblastic neoplasia. J Reprod Med.2008; 53: 481–486. [PubMed] [Google Scholar]