

## Importance of Systemic Primary Active Chemotherapy, Tumor Marker in Complete Remission of Choriocarcinoma, and their Application in its Prevention

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### Short Communication

Methotrexate (MTX) was necessary to the chemotherapy of choriocarcinoma (CC) by the primary systemic administration, that was the whole body treatment before any local therapy, e.g. hysterectomy or radiation, where CC was monitored by its tumor marker, human chorionic gonadotropin (hCG), excretion by CC cells, which was reduced if the CC was sensitive to MTX, Ultrasonic Doppler resistance or pulsatility index was promptly lowered if the CC was sensitive to MTX, that decreases the hCG. The choriocarcinoma is a type of tumor that affects women and develops from placental cells. This rare form is also known as gestational choriocarcinoma. The CC tumor has shown an effective cure rate due to high chemosensitivity. With the invention of the chemotherapy along with the combination of other therapy, almost all the cases of CC tumor are curable. Measurement of hCG has shown effectiveness in the management of the dormant CC tumor cases. Various multi-modality approaches have helped to trace the progress of the chemotherapy. The chemotherapeutic disappearance of CC tumor was known by pulmonary X-ray, uterine angiography and ultrasound imaging at present, while the loss of CC cell was known by the disappearance of beta hCG in circulating blood and negative pregnancy test, the loss of urinary hCG. As the relation of hCG and tumor cell was very close, complete CC remission was known by the loss of hCG, namely, normal intrauterine pregnancy was achieved after the complete CC remission confirmed by the loss of hCG [1], and no recurrence for 20 years after MTX chemotherapy of brain CC metastasis.

The clinical achievement of CC chemotherapy is confirmed by the high significance in the number of reduction of CC patients and the mortality rate of the CC patients.

Since the CC developed mainly after the occurrence of the hydatidiform moles (mole), which are the trophoblasts that were histologically found in the endometrium after the mole, and there were positive pregnancy test after the mole, prophylactic chemotherapy was planned after some molar pregnancies. Aberrant fertilization has resulted in hydatidiform mole formation. These moles are the proliferation of the syncytiotrophoblastic and cytotrophoblastic cells that leads to the chorionic villi swelling. Main target of MTX chemotherapy was 2 cases of positive pregnancy test, which indicated the presence of trophoblasts in the body of postmolar patient. The pregnancy tests were shown negative after receiving 200 and 300 mg of MTX. Pregnancy test was negative in other 105 postmolar cases, who received only 70 mg of MTX. There were 107 post molar cases in total that were treated by MTX, where no CC developed after the mole formation. However, 6 cases (7.4%) developed CC among 81 cases, who have not received MTX. There was significant difference between two groups after the mole formation. Thus, the preventive MTX treatment was effective in the treatment of the CC tumor. The randomized control test conducted by Unio Internatonalis Contra Cancerum (UICC) has achieved similar results. These results will thereby lead to proper management of the CC tumor and disease complication's associated with it in women. Despite of these challenging approaches to the patients, it may help to necessitate the management of interventions and prognosis to the disease treatment.

### Reference

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