

# Pulmonary metastasis in Chorio-carcinoma: “Before and After Chemotherapy”

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## Citation

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## Abstract

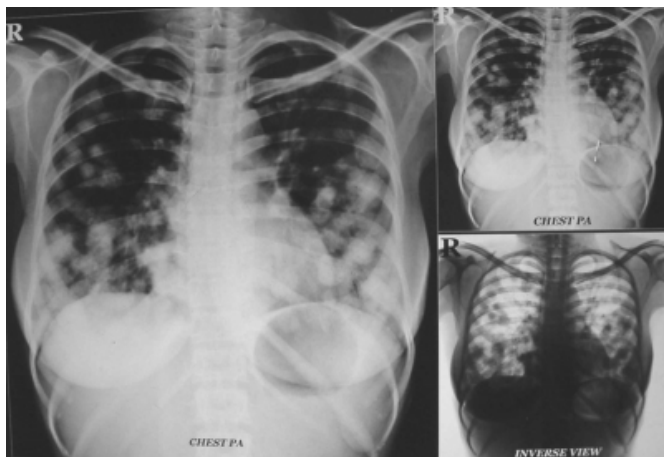
### CASE SUMMARY

This is a case of a 26-yr old lady who was diagnosed to have chorio-carcinoma, after she presented with complaints of irregular vaginal bleeding for one year and hemoptysis for five months. This was following a missed abortion one year back for which dilatation and curettage was done elsewhere. There was a history of one previous full term child birth and two abortions previously. Histopathology of the curettage had revealed few atypical cells in necrotic background with mild inflammatory cell infiltration.

When she presented to our institute, a complete metastatic work-up including complete blood counts, liver function tests and serum  $\beta$ -HCG level was done. Baseline blood investigations were within normal limits and serum  $\beta$ -HCG levels at admission was 6, 37,000 IU/ml.

### Figure 1

Figure 1: Chest X-Ray showing “cannon-ball” pulmonary metastasis before chemotherapy.



Chest X-Ray was done which showed evidence of pulmonary metastasis (Figure 1) in the form of “cannon-ball metastasis”. Contrast enhanced CT (CECT) chest confirmed

the pulmonary metastasis. CECT abdomen had revealed a bulky uterus with 4x3x3.5 cm intense heterogeneously enhancing area and multiple infarcts in both kidneys with presence of a simple cyst. CECT head was normal. According to FIGO risk scoring system, her score was 12 (high risk Gestational trophoblastic neoplasia).

Patient was administered EMA-CO chemotherapy i.e. Etoposide, Methotrexate and Actinomycin on Day 1 and 2; Cyclophosphamide and Vincristine on day 8. After 4 cycles of EMA-CO, her  $\beta$ -HCG levels fell down to 2467.49 IU/ml and chest X-Ray too showed significant resolution of metastatic lesions (Figure 2).

### Figure 2

Figure 2: Chest X-Ray showing post chemotherapy lesion



## **BACKGROUND**

Pulmonary metastases are common and most frequently occur with tumors that have rich systemic venous drainage. Examples of such metastases include renal cancers, bone sarcomas, chorio-carcinomas, melanomas, testicular teratomas, and thyroid carcinomas. Chest X-Ray is usually the first imaging modality in which the metastases are diagnosed. It is important to recognize these lesions, as it changes the stage of disease and treatment course.

In chorio-carcinoma, usually 60% of patients have pulmonary metastasis at presentation, and in 70-100% cases, the pulmonary lesion is detected at autopsy. The presence of pulmonary metastases is a bad prognostic factor that indicates disseminated disease. In chorio-carcinoma,

presence of pulmonary metastasis upgrades the lesion to stage III disease and asks for combination multidrug chemotherapy-EMACO. However, chemo-sensitive tumors, such as chorio-carcinoma and testicular teratoma, have a better prognosis. Tumor may manifest in lungs as pulmonary nodules as in Figure 1. Pulmonary nodules are the most common manifestation of secondary neoplastic disease in the lungs. They are usually derived from tumor emboli that arise from invasion of tumor capillaries. The tumor emboli drain via the systemic veins and pulmonary arteries, subsequently lodging in the small pulmonary arteries or arterioles and extending into adjacent lung tissue. Chemotherapy may change appearance of these lesions (Figure 2). Complete resolution is rare.

## **References**

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