Metastatic Choriocarcinoma Following Live Birth – A Rare Presentation

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Abstract:

Choriocarcinoma is the most malignant tumor of gestational trophoblastic neoplasia. Post-partum choriocarcinoma is an infrequent event with poor prognosis. The diagnosis is usually delayed due to failure to recognize the mode of presentation of this disease. Being a rare occurrence, limited data is available regarding its clinical features. We present a 24 years old women with parity one delivered by caesarean section indicated for premature rupture of membrane with fetal distress at 39 wks of pregnancy. Frequent episodes of heavy vaginal bleeding had started 28 days following C/S. For this, she had H/O uterine evacuatin twice within 5 days interval. Biopsy report of second curettage showed choriocarcinoma. On admission to Dhaka Medical College Hospital (DMCH), the pretreatment Human Chorionic Gonadotrophin (βhCG) level was >200000.0 IU/L, uterine mass of about 18 wks pregnancy size & X-Ray chest showed segmental consolidation in left mid zone of lung. After consultation with oncologist Etoposide, Methotrexate, Dactinomycin, Cyclophosphamide & Vincristine (EMACO) therapy was started but before completion of her proposed cycles, she developed a live threatening condition which was managed very urgently and meticulously. Now the patient is under regular monitoring.

Key words: GTD, Choriocarcinoma

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Introduction:

Choriocarcinoma is a malignant proliferation of syncytial trophoblast cells that do not form placental villi. Gestational choriocarcinoma may occur as a sequel to any type of human pregnancy. Choriocarcinoma is a rare trophoblastic tumor occured approximately 50% after term pregnancy, 25% after molar pregnancy and the remainder after other gestational events[1,2,3]. Choriocarcinoma following a live term birth occurs in 1 per 50,000 births and it is associated with an unfavorable out come. In the majority of cases the choriocarcinoma present either as a growth in the uterus that fills up the uterine cavity or may perforate the uterine serosa. In some cases the primary foci may disappear and patient present with secondaries mainly in the vagina, lungs, brain or liver[4]. If untreated, it is often swiftly fatal with distant metastasis.

Post term gestational choriocarcinoma has a propensity for more extensive metastatic spread particularly in liver and brain and remission rate in patients to conventional chemotherapy is lower than other forms of Gestational Trophoblastic Disease (GTD) (Remision rate – 61.5%)[2].

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Case Report:

A 24-years old muslim women of lower middle class scocio-economic group from Kurigram was reported to DMCH, Gynae Outpatient Department on 12.02.09 with H/O caesarean section indicated for 39 week was pregnancy with ruptured membrane with fetal distress on 22.11.08 at Kurigram local clinic. The patient had uneventful post partum period for about 28 days. Then she developed excessive per vaginal bleeding with lower abdominal pain. For this, she went to see doctor. They did a uterine evacuation having a suspicion of retained bits of placenta. After 5-6 days, again she developed per vaginal bleeding and USG revealed molar pregnancy. Then again D&C was done on 02.02.09 in Rangpur Medical College Hospital. Biopsy of uterine curettage showed choriocarcinoma. There she got 5 units of whole blood transfusion. Then she got herself admitted into DMCH for further management.

On examination, her general condition was poor, severely anaemic, mild ascities & crepetation in left lung. Abdominal examination revealed a tender, irregular firm mass of about 18 wks pregnancy size. On vaginal examination the mass appeared to be uterine in origin, firm with restricted mobility.

Laboratory evaluation showed S. âhCG > 200000.000 IU/L, Hb% - 8 gm/dL, USG showed irregular mass (11.9 x 11.4 cm) in fundal part of uterus. Multiloculated cyst in both ovaries. Rt. 11.9 x 8.5 cm, Lt. 12.1 x 7.4 cm. Free fluid in peritoneal cavity (mild ascitis), X-Ray Chest – Segmental consolidation in mid zone of left lung. Other required investigations were within normal range.

Our diagnosis was stage III chorio-carcinoma and schedule of Etoposide, Methotrexate, Dactinomycin, Cyclophosphamide & Vincristine (EMACO) regimen for total of 6 cycle with 14 days window period was planned. After correction of anaemia patient got 1st cycle of chemotherpay which was completed on 26.02.09. S. βhCG level was 101465.29 IU/L on 01.03.09. Unfortunately, the patient developed low grade fever, loose motion and blood count showed neutropenia. Consulting oncologist advised to postpond 2nd cycle of chemo until satisfactory blood count and improved general condition of the patient. Supporting treatment was countinuing.

Meanwhile, she developed high fever, severe abdominal distension, respiratory distress and suddenly she developed shock. Urgently shock management was done and immediately taking high risk bond, laparotomy was done. Lower mid line incision was given. There was huge amount of blood stained pus forming different pockets adherent with each other inside the peritoneal cavity was found. Digital separation of the dense adhesions revealed an ugly looking friable, necrosed blackish growth protruding out through the rent of the uterine fundus. Bladder was densely adherent with previous caesarean scar. During separation of bladder, previous uterine scar was opened and massive hemorrhage occurred. Sub total Hystrectomy was done very quickly. Search for metastesis to other organs was done. After proper toileting, closure was done meticulusly. Post operatively, the patient was managed with intensive care and monitoring.

Her biopsy report showd atypical and mitotically active cytotrophoblast and syncytiotrophoblast. The tumor showed extensive central necrosis. The patient was monitored accordingly with serial βhCG, X-Ray chest, Blood count, renal & liver function test and abdominal USG.

All reports were normal. βhCG titer was also declining till 3 consecutive readings.

S. βhCG on
1. 04.04.09 – 161 IU/ml
2. 16.04.09 – 121 IU/ml
3. 30.04.09 – 02 IU/ml
4. 14.05.09 – 36 IU/ml

As βhCG titer was rising, the patient was planned for further chemotherapy. Fortunately, the patient was able to complete her next doses of chemotherapy without any adverse event. Gradually she was improving. She was discharged from hospital after having 3 consecutive, S. βhCG found within normal range. Till to date she is in our contact for physical examination and βhCG monitoring at scheduled interval.

Discussion :

The rare occurrence of choriocarcinoma after a live birth or non-molar abortion often leads to symptoms and signs of this disease being ignored. Although the most common cause of post partum haemorrhage is complication of delivery, but should be remember that GTD may be occured. Post-term choriocarcinoma appeared to have a propensity for early dissemination with frequent involvement of liver and brain[4]. However, despite its aggressive behavior, the opportunity for cure in patients with post term choriocarcinoma may still be favorable with early diagnosis, as observed by different authors[5]. In our patient, the response to chemotherapy was not very satisfactory at first. This may be due to the relatively late diagnosis and big tumor bulk.

Because post-term choriocarcinoma is uncommon the clinician's index of suspicion for choriocarcinoma is markedly diminished after a term pregnancy resulting in protracted delay in diagnosis. This may lead to advanced disseminated disease with extensive involvement of vital organs. The diagnosis of choriocarcinoma should therefore be considered in any women in the reproductive age group presenting with abnormal vaginal bleeding or unexplained systemic symptoms. Serial testing of serum concentration is essential in monitoring, treatment and confirming remission. Monitoring of âhCG concentration should be continued for life as late recurrence may occur. The time of presentation of choriocarcinoma varies. Although the tumor can develop as soon as 4 weeks after the antecedent gestation, late presentation of choriocarcinoma has been reported, including as many as 15 years after gestation and even after menopause. Improve survival may be achieved by both early detection and prompt initiation of therapy. The obstetrician and pathologist should have an increased awareness of placental choriocarcinoma and its manifestations. Clinical suspicion and any gross placental anamoly should mandate a thorough pathological examination of placenta. Diagnosis is ideally on the basis of raised concentration of âhCG and appropriate histology. Early diagnosis of the condition can lead to remarkable outcome with timely institution of proper chemotherapy[6].

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