Recurrent Molar Pregnancy

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Introduction

Hydatidiform mole is the result of abnormal gametogenesis and fertilisation, characterised histologically by abnormalities of the chorionic villi that consist of trophoblastic proliferation and oedema of villous stroma. The frequency of molar pregnancy in western countries is about 1:1000-1200 pregnancies. Though reports of molar pregnancy occurring more than once in the same woman are available, but the repetition is rare. There are instances where molar pregnancy has recurred for the sixth time [1]. A case of molar pregnancy recurring for the fourth consecutive time is reported.

Case Report

A 26 year old gravida 4, para 0 with three previous molar pregnancies, reported with the history of eight weeks of amenorrhea and irregular bleeding per vaginum. There was no history of abdominal pain, vomiting, or giddiness. Her menstrual history was regular, 28 days cycle and 3 to 4 days duration. On examination, her general condition was good. There was no clinical evidence of hyperthyroidism. Her pulse rate was 88 per minute and blood pressure was 120/80 mm of Hg. Systemic examination did not reveal any abnormality. Per speculum examination showed healthy cervix and scanty brownish discharge from the cervical os. Per vaginal examination revealed 8-10 weeks size uterus, which was corresponding to the period of amenorrhea. There was no tenderness or mass in the fornices. In view of the previous history of molar pregnancies, a clinical diagnosis of pregnancy complication, probably molar pregnancy, was made. Pelvic ultrasonography revealed enlarged uterus and cavity showed mixed echogenic area with snowstorm appearance. The diagnosis of recurrent molar pregnancy was made. Her serum beta human chorionic gonadotrophin (hCG) was 29000 mIU/ml. Thyroid profile was within normal limits. Haemoglobin, platelet count, serum bilirubin, blood urea, serum creatinine, prothrombin time were within normal limits. Molar pregnancy was evacuated under anesthesia. Post evacuation beta hCG was 40000 mIU/ml. In view of recurrent molar pregnancy and raised post evacuation beta hCG, she was put on prophylactic

chemotherapy with methotrexate. Injection methotrexate 1 mg/kg intramuscularly (IM) was given on day 1,3,5,7 and injection folinic acid 0.1 mg/kg IM was given on day 2,4,6,8. The patient was followed up with the estimation of serum beta hCG every two weeks and it became negative after three months.

Discussion

Hydatidiform mole is a gestational trophoblastic disorder due to abnormal gametogenesis and fertilization. There are two types of hydatidiform mole namely complete and partial. Complete hydatidiform mole results from the fertilization of an egg, from which the nuclear material has been lost or inactivated, by a single sperm being 23x chromosomes which duplicates to 46xx. This makes complete mole homozygous, female and androgenic in origin [2]. Less frequently, fertilization occurs with two sperms resulting in either 46xx or 46xy heterozygous chromosomal constitution [3]. In partial hydatidiform mole, maternal chromosomes are present and the condition arises by diandry (one maternal and two paternal sets of chromosomes) [4]. Both forms of moles are potentially malignant. The risk of gestational trophoblastic neoplasia for partial mole is <5-10% and that of complete mole is 20%. The risk of recurrence of hydatidiform mole is 0.5- 2.8% with a subsequent greater risk of developing invasive mole or choriocarcinoma [5]. The risk of repeat hydatidiform mole in next pregnancy is 1:76 while the risk after two past hydatidiform mole is 1:6.5 [6]. The risk of choriocarcinoma of hydatidiform mole is less than 3%. The role of prophylactic chemotherapy for high risk mole is controversial. The risk factors are pre evacuation uterine size larger for gestational period, age more than 40 years, bilateral theca leutein cyst of more than six cms size, pre evacuation hCG level more than 1,00,000 mIU /ml, medical complications of molar pregnancy like hyperthyroidism, preeclampsia, embolization and repeat molar pregnancy [7]. Some centers advocate prophylactic chemotherapy to all patients with molar pregnancy. However, based

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on serum hCG monitoring and clinical presentation only 7.8% moles subsequently require chemotherapy. The factors considered are high levels of hCG of more than 4 weeks post evacuation (serum >20,000 IU/L; urine >30,000 IU/24 hours), persistent uterine hemorrhage, progressively rising serum beta hCG level at any time post evacuation, any detectable hCG not showing tendency to extinction, 4-6 months post evacuation, evidence of brain, renal, hepatic, gastrointestinal tract or pulmonary metastases with any level of hCG.

Repetitive hydatidiform moles in women with different partners would suggest that an oocyte problem leads to molar development [8,9]. Since abnormal fertilization and gametogenesis is the cause of this condition, artificial insemination donor or invitro fertilization with donor ovum or surrogacy with donor sperm and ovum is a logical solution to prevent repeat molar pregnancy.

Conflicts of Interest

None identified

References

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