An Unusual Presentation of Choriocarcinoma

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Abstracts: Gestational choriocarcinoma is a highly malignant tumor of trophoblastic cells with a propensity to metastasize to various sites including lungs, vagina, brain, liver, kidney, and gastrointestinal tract, in descending order of frequency. Usually it is treated by chemotherapy but rarely hysterectomy is indicated if bleeding is heavy, or if tumor is resistant to chemotherapy A 45-year-old woman presented to the hospital as an emergency with heavy bleeding per vagina since 4 days preceded by abdominal pain. H/O spontaneous abortion of 5months pregnancy 2 yrs back and was asymptomatic since 2years. Investigations showed severe anemia and high level of β-hCG. She underwent Total abdominal Hysterectomy for heavy bleeding and Histopathology revealed it to be a case of gestational choriocarcinoma. Chemotherapy was given pre and postoperatively and resulted in complete cure. [Swami M S NJIRM 2014; 5(4) :112-114]

Key Words: Choriocarcinoma, Gestational choriocarcinoma, Gestational Trophoblastic Disease

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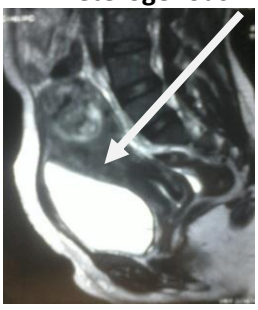
Introduction: Gestational choriocarcinoma is a highly malignant tumor of trophoblastic cells with a propensity to metastasize to various sites including lungs, vagina, brain, liver, kidney, and gastrointestinal tract, in descending order of frequency. The ultimate cause of gestational trophoblastic disease is claimed to be genetic in origin[8]. No environmental etiological factor has been implicated up till now apart from deficient vitamin A precursor carotene in diet[1]. The first case of choriocarcinoma after in vitro fertilization (IVF) was reported by Flam F et al[2] and the second by Scott P et al[3.] Choriocarcinoma is usually treated by chemotherapy but rarely hysterectomy is necessary[9]. Indications for hysterectomy are (1) tumor resistant for chemotherapy (2) Heavy uncontrolled bleeding[7]. We hereby report an unusual case of Choriocarcinoma producing heavy uncontrolled bleeding resulting in severe anemia at 45 yrs age and treated successfully by hysterectomy and chemotherapy.

Case Summary: Female aged 45 year, reported on 27 jan 2014 with complaints of Heavy bleeding per vagina since 4 days, Preceded by pain in lower abdomen. Menstrual cycles were regular. Last menstrual period was 8 days back. Obstetric history Para2, Abortion1, history of spontaneous abortion of 5months pregnancy 2 yrs back. After abortion, bleeding per vagina persisted for 1 month for which she took some medical treatment in village & got relieved. On examination Temperature 98.6F, Pulse 90/min, Respiratory rate 20/min, BP 100/70 mm Hg, Pallor +3, edema +1, Respiratory and cardiovascular systems were normal. Abdominal examination revealed that, Uterus was 12 weeks size, bleeding through os present. Per vaginal examination revealed cervix firm to soft in consistency, Uterus 12 weeks size, firm to soft, non tender, both fornix non tender. Her hemoglobin level was 2.9gm/dl, Blood group A positive, Urine pregnancy test (UPT) was positive, Total serum β hCG was 56,205 mIU/ml. Chest-XRAY was normal, USG pelvis showed Focal thickening of the endometrium with maximum thickness noted up to 20mm in the fundo body region, in the lower portion. Endometrium was 4-5mm in thickness. Thickened area showed hypervascularity with multiple small cystic areas of approximately 5mm in size. Uterus measured 11x4 cm.

Figure 1: MRI- Heterogenous Mass Lesion



Right ovary showed cyst of 24x19mm, left ovary normal. Mild fluid noted in pouch of Douglas. She received 4 units red cell concentrate, intravenous iron sucrose 800mg, fresh blood transfusion 4

units**.** Total serum β-hCG was 115000 mIU/ml on 4/2/14. MRI pelvis showed Enlarged uterus with heterogenous mass lesion in myometrial planes of fundus of uterus protruding into uterine cavity not extending beyond serosa. Possibility of neoplasm was considered & histopathology recommended. Histopathology report was choriocarcinoma

Figure 2:

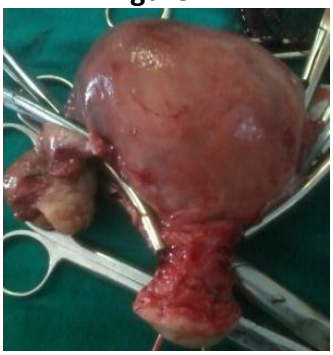
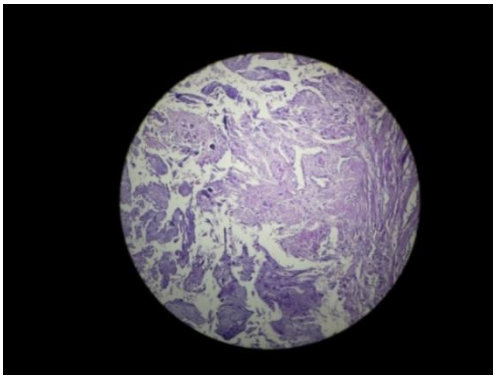


Figure 3: Choriocarcinoma

Figure 4: Choriocarcinoma

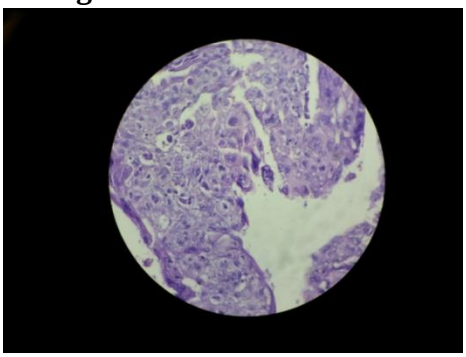


Langhans & syncytial cells

Laparotomy with total abdominal hysterectomy with right salpingo-ohhorectomy done on 8-2-14. Histopathology report was Choriocarcinoma with luteal cyst of right ovary & non neoplastic left paraovarian cyst

Postoperatively On 10-2-2014 total serum β-HCG was 14,266 mIU/ml . On 22-2-2014 Total serum β-HCG was 897 mIU/ml. Tab. Methotrexate 5mg, 5 times a day for 5days was started preoperatively and continued postoperatively. On 3-3-2014 Total serum β-HCG was 174.14 mIU/ml, Hb= 10.6gm% , TLC= 7900/ml, platelet 2.9 lac/ml, Chest X ray-normal . On 4-3-14 she was Discharged on request, advised Follow up after 10 days for further chemotherapy course. Total 5 cycles of Methotrexate were given at the interval of 10-15 days. Her monthly follow up till date has shown normal values of β-hCG and no evidence of recurrence.

Figure 5: Choriocarcinoma



Langhans & Synsytial cells

Discussion: Gestational choriocarcinoma is the most malignant form of a group of tumors including complete and partial molar pregnancy, invasive mole, placental site trophoblastic tumor, and choriocarcinoma. They are collectively known as Gestational Trophoblastic disease. Although choriocarcinoma has a very high propensity to metastasize to various sites including brain, lung it has also a very high cure rate. Non-gestational choriocarcinoma also occurs and is usually resistant to therapy[4]. The precise molecular pathogenesis of gestational trophoblastic disease is yet to be elucidated. Genetics has a well established role. Kajii reported that all chromosomes in true moles (complete moles) are of paternal origin (androgenetic)[5]. Cytogenetic analysis revealed that in 90% of the time trophoblasts have 46XX diploid pattern all derived from the sperm. In complete moles no maternal DNA is present in the ovum. Sometimes two

sperms can fertilize one empty ovum. In both cases embryonic development does not occur. Choriocarcinoma arise much more frequently from complete moles (2%). Ethnic origin, age, diet and oral contraceptives have been implicated as a risk factor for gestational trophoblastic disease (GTD).

Conclusion: our case is 45 yrs women with unusual presentation of choriocarcinoma of heavy bleeding that occurred 2 years after a spontaneous abortion which had not shown any evidence of molar pregnancy and cured completely by hysterectomy and by chemotherapy.

References:

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