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Case Report

Choriocarcinoma

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Introduction

Choriocarcinoma is the most aggressive form of gestational trophoblastic disease. Early detection of persistent gestational trophoblastic tumor depends on careful follow up of postmolar βhCG levels and suspecting the condition in a woman of reproductive age with unexplained gynecological and/or systemic symptoms. We report a case of choriocarcinoma with metastasis and negative urine pregnancy test, suspected only at the time of laparotomy and confirmed by histopathology.

Case report

A 19 year old unmarried girl was referred on 1st March, 2006 from a peripheral hospital with complaints of fever, pain in abdomen since two weeks and history of vaginal discharge since 1 week, ultrasound revealing features suggestive of missed abortion and a negative urine pregnancy test. There was no history of amenorrhea and previous cycles were irregular. She had excessive vaginal bleeding a year back for which possibly a curettage was done. There was no confirmatory record with her. Her last menstrual period was on 26th January, 2006. Her general condition was poor. There was marked pallor with jaundice. She was febrile at 99.8^{0}C. Her pulse rate was 114 beats/min and JVP was 6 cm of water. Respiratory rate was 35/minute and crepitations were present on auscultation. Both breasts showed increased pigmentation of areola. Abdomen was tense and distended with tender hepatomegaly. Bowel sounds were poorly heard. On speculum examination cervical os was parous. On bimanual examination uterus was normal in size, anteverted and mobile. Right forniceal fullness was present.

Urine pregnancy test was negative, hemoglobin was 4g/dL, total WBC count was 12,900 /mm^3, and hepatic enzymes were raised, SGOT – 360 IU/L, SGPT – 290 IU/L, Alkaline Phosphatase – 197 IU/L. X-ray of the abdomen showed dilated bowel loops and ground glass appearance with air fluid levels. Clinical diagnosis was septicemic shock, paralytic ileus and peritonitis. Broad spectrum antibiotics were given - injection cefotaxime 1gm IV, 12 hourly, injection gentamycin 60 mg IV 12 hourly, injection metronidazole 500 mg IV 8 hourly. All these drops were given from the date of admission till the patient expired i.e. for 2 days. Inspite of adequate blood transfusion her hemoglobin did not rise and her general condition deteriorated. She developed melena on 2nd March, 2006. With counseling about the grave risk and proper consent she was taken up for surgery. Dilatation and curettage was done for followed by laparotomy which revealed intraoperatively ileo-ileal

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intussusception and bilateral twisted theca ovarian cysts of 10x10cm size. Molar pregnancy was now suspected. Multiple bleeding lesions were present on the liver. Uterus was of normal size and freely mobile.

Nonviable intestine was excised and end to end intestinal anastomosis was done. Bilateral salpingo-oophorectomy was done. Bleeding from lesions of the liver did not stop and hence a pressure mop was placed at these sites and the abdomen closed and with a plan to re-laparotomy planned at a later date. Postoperatively her condition worsened inspite of blood transfusions and she was declared dead at 12.10am. Postmortem examination was done and liver and small intestine were sent for histopathological examination.

Curettage specimen had a single circular tissue bit measuring 1x0.5 cm. Histomicroscopically it showed an occasional syncytiotrophoblast tumor cells amidst red cells.

Bilateral ovarian cystic masses measuring 9x7x3 cm and 9x8x4.5 cm revealed multiple theca lutein cysts with areas of inflammation and hemorrhage, Figure 1.

Uterus measuring 10x6x1 cm had hemorrhagic discoloration measuring 1.5 cm in the fundus close to serosa. Endometrium and myometrium were unremarkable with areas of hemorrhage. Uterine fundus revealed large focus of ischemic necrosis extending upto the serosa. No tumor tissue was evident in the uterine sections.

The excised small intestine measured 11 cm in length and its serosal surface showed some areas of congestion, while the lumen showed a hemorrhagic polypoidal mass measuring 5x2 cm.

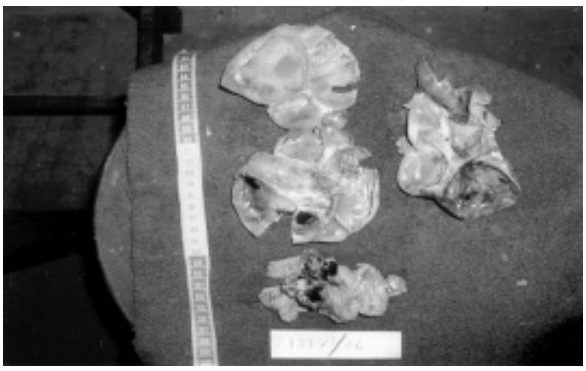

Figure 1. Ovaries with multilocular cysts with gelatinous material and foci of hemorrhage

Outer surface of the liver showed intact capsule with dark red multiple hemorrhagic spots with partly nodular appearance. Cut surface of the liver showed large necrotic foci of extensive hemorrhage with granular spongy appearance. Microscopically liver and polypoidal mass of intestine showed large aggregates and bilaminar pattern of cytotrophoblast and syncytiotrophoblast amidst extensive hemorrhage, Figure 2 and 3.

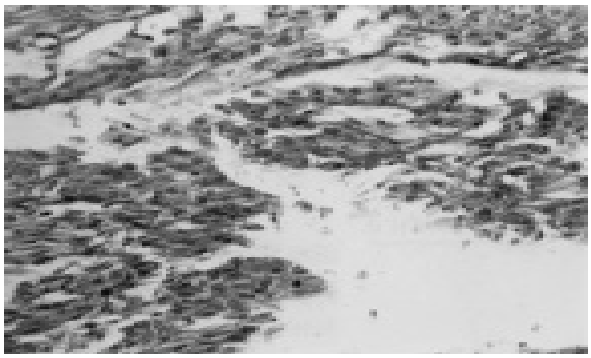

Figure 2. High power magnification showing hyperreactio lueteinalis

Figure 3. Intestinal polyp showing synctiotrophoblasts and cytotrophoblast with extensive hemorrhage

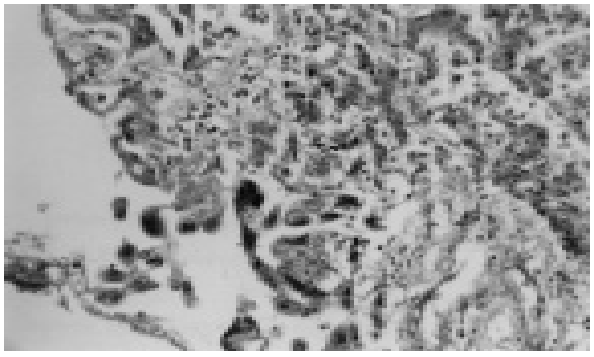

Figure 4. Section of the liver showing the syncytiotrophoblast and cytotrophoblast.

Discussion

Choriocarcinoma is the most aggressive form of gestational trophoblastic disease. It is a rapidly invasive widely metastatic human chorionic gonadotropin producing neoplasm, usually intrauterine and gestational. Most of the cases occur following a complete hydatidiform mole. It can also be preceded by a partial mole, ectopic pregnancy, nonmolar intrauterine abortion or term pregnancy. In case of choriocarcinoma following abortion whether molar or not, the latent phase is almost always less than a year. Residual tumor in the uterus of a patient dying of disseminated choriocarcinoma may be inconspicuous or altogether absent. In our case we found tumor cells in the curettage specimen as evidence of primary tumor. Natural history of untreated choriocarcinoma is characterized by the development of early hematogenous metastasis, most common sites being lungs brain, liver, kidney and bowel. They can be clinically solitary and may present with massive hemorrhage. In our case we found secondaries in liver and intestine; lungs being grossly normal were not sent for histopathology.

Many of the morphological changes seen in other organs in patients with choriocarcinoma are the result of increased secretion of hCG and other hormones by the tumor cells. These include hyperplasia of endocervical glands, decidual reaction, Aria-Stella phenomenon, bilateral enlargement of ovaries by theca-lutein cysts, and hyperplasia of mammary lobules. Currently fewer patients with complete hydatidiform mole present with the traditional symptoms of complete hydatidiform mole when compared with historic controls[4]. Because of the small chance of developing an invasive mole after a partial mole, all cases with suspected partial mole should be reviewed centrally and if confirmed, they need hCG follow up[3]. In our case urine pregnancy test was negative. Negative urine pregnancy test in a patient with a hydatidiform mole is very rare and false negative results may be due to high level of βhCG due to high dose hook effect[1].

References

1. Tabas JA, Strehlow M, Isaacs E. A false negative pregnancy test in a patient with a hydatidiform molar pregnancy. N Engl J Medicine 2003;349:2172-3.
2. Berkowitz RS, Goldstein DP. Gestational trophoblastic disease. Cancer 1995;76:2079-85.
3. Seckl MJ, Fisher RA, Salerno G et al. Choriocarcinoma and partial hydatidiform moles. Lancet 2000;356:36-9.
4. Soto-Wright V, Bernstein M, Goldstein DP et al. The changing clinical presentation of complete molar pregnancy. Obstet Gynecol 1995;86:775-9.