# CHORIOCARCINOMA FOLLOWING TUBAL PREGNANCY AFTER MENOPAUSE

by

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A large number of cases of choriocarcinoma of the uterus have been reported both in the foreign and in the Indian literature. But, choriocarcinoma following tubal pregnancy is very rare. The rarity prompted us to report this case.

#### CASE REPORT

Mrs. S., 50 years old, menopause since one year was admitted on 4-1-72 with the complaints of pain in the abdomen off and on and profuse irregular bleeding per vaginam for the last one and a half years. She had five full term pregnancies and two abortions with last delivery fifteen years back.

On general examination she was of weak build and cachetic.

On abdominal examination a lump was felt in the suprapubic region about 20 weeks' size of pregnancy with irregular and nodular surface, firm in consistency, slightly mobile from side to side, non-tender, lower limit of the swelling not reached.

On pelvic examination cervix was directed backwards, uterus anteverted and incorporated with a mass extending upto one inch below the umbilicus, felt through all the fornices.

On per speculum examination cervix was healthy.

Laboratory investigations revealed, Hb. 6.4 gms, T.L.C. 10,300/cmm, D.L.C.-P-72%,

L-22%, E-4%, M-2%. Fasting blood sugar, 65 mg%, blood urea 20 mg%. Urine and stool examinations did not reveal any abnormality. Plain X-ray of abdomen revealed a soft tissue shadow. X-ray chest showed no evidence of secondaries.

She was treated for anaemia. The patient was operated on 28-1-72. The intestines were adherent to the upper surface of the tumour so that the uterus could not be visualised. Adhesions were broken and the uterus was seen to be bulky. Right tube and ovary were normal and on the left side only a portion of the tube was identified over the surface of the tumour, which consisted of haemorrhagic friable tissue extending down into the pouch of Douglas, laterally upto the pelvic wall as well as left side. Liver and spleen were normal. Total hysterectomy with bilateral salpingooophorectomy was done, tumour removed piecemeal and the whole specimen was sent for histopathological section. Postoperative recovery was uneventful. She was given three courses of methotraxate.

### Gross Pathology

Specimen of uterus with adenexae measuring  $8 \times 6 \times 4$  cm. showing an irregular, greyish friable mass on the left side involving the tube and attached to the uterus. Right tube measuring 5 cm. in lengh  $\times$  0.5 cm. in diameter. Right ovary measuring  $2 \times 2 \times 1$  cd. Cut surface shows varigated appearance with haemorrhage.

#### Histopathology

The tumour mass was found to be choriocarcinoma with invasion of blood vessels. Left tube showed tumour emboli. Right tube was free of metastasis. Myometrium

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showed moderate hyperplasia with thickened blood vessels. Cervix-chronic cervicitis with cystic dilatation of the cervical glands. Endometrium showed decidual reaction.

Tubo-ovarian mass was examined at 18 different sites wherever viable tissue was seen. It consisted of clumps of polyhydral cells surrounded by syncytial mass with extensive areas of necrosis and haemorrhage with tumour emboli present in vascular spaces.

#### Diagnosis

Choriocarcinoma invading wall of the fallopian tube which might have ruptured outside. Tumour origin seems to be from tubal pregnancy.

## Discussion

The reported incidence of primary choriocarcinoma of the tube varies amongst authors. Risel (1905), Pollosson and Violet (1913) reported cases of choriocarcinoma as 3% and 6.5% in their series of 300 and 455 cases of choriocarcinoma, but only occasional cases of choriocarcinoma following tubal pregnancy are reported. According to Teacher (1903) in 188 cases collected by himself, choriocarcinoma was preceded by vesicular mole in 73, abortion in 89, pregnancy at term in 49 and extrauterine pregnancy in 7. In 24 cases collected by Brews (1939) choriocarcinoma was preceded by vesicular mole 8, abortion 7, normal pregnancy 4 and nature of pregnancy not recorded in the report was 5. Fimorola in 1947 studied 436 cases of ectopic gestation and found no case of choriocarcinoma. During a seven years study by Heiss from 1946 to 1953 at the Gynaecology Clinic of Craz, 540 tubal pregnancies were evaluated and only one case of primary choriocarcinoma following an ectopic pregnancy was found giving an incidence of 0.18%. Hertig (1950) made a general statement that choriocarcinoma is preceeded by hydati-

diform mole in 50% of cases, abortion in 25%, normal pregnancy in 22.5% and ectopic gestation in 2.5%. In 1957 Hertig and Mansell in a fine review devoted to hydatidiform mole and choriocarcinoma do not mention a single case of tubal choriocarcinoma. In a series by Narayana Rao (1968) the type of preceding pregnancy was uterine abortion in 9 cases, hydatidiform mole in 2, full term pregnancy in 4 and tubal pregnancy in 1 case, whereas in Rao and Shetty's series (1961) the preceding pregnancy was abortion in 11 cases, hydatidiform mole in 11 cases, full term pregnancy in 5 cases. Two of Sisson's cases followed ovarian and intraligamentary pregnancies, both having malignancies initially. In a review of 91 cases of hydatidiform mole and choriocarcinoma, Smallbraack (1957), reported only 2 cases of extrauterine choriocarcinoma. In a detailed survey of 905 cases of ectopic pregnancy over a period of 16 years Bobrow and Bell (1962) mention that none of these cases terminated in hydatidiform mole or choriocarcinoma. Hertig and Ross (1962) mentioned only 2 cases of choriocarcinoma during the last four years as quoted by Riggs et al (1964) who added one of their own.

It is difficult to diagnose a case of tubal choriocarcinoma, as the lesion possesses many characteristics of choriocarcinoma of the uterus. There is similarity in age group, clinical symptoms and positive hormonal titre in high dilution. The interval between the termination of pregnancy and development of choriocarcinoma varies from few months to as long as 25 years. In our cases the interval of known pregnancy was about 15 years.

Since the histogenesis of choriocarcinoma remains obscure, primary choriocarcinoma of the tube may originate either from an ectopic pregnancy or an intrauterine pregnancy that has spread to the tubes (via embolic transport of chorionic villi) or from teratogenous changes within the tubes that is unrelated to pregnancy.

Ectopic pregnancy commonly occurs in women of relatively younger age group, but the present case was in a woman of fifty years having menopause for the last one year similar to that reported by Madan et al (1966). In Paranjyoti's (1965) series of 37 cases, oldest age of the patient was also 50 years. She did not find a single case of choriocarcinoma after a tubal pregnancy. Hitohmann and Criso Eopatti (quoted by Park Lees) stated that they would prefer to postulate a fresh pregnancy even after the menopause rather than accept long latency of development of choriocarcinoma. Krosing (1966) described an example of delayed development of choriocarcinoma and gave a list of 20 other such cases. There are several examples in his series of choriocarcinoma developing several years after the menopuse. From general review of 517 cases of Park Lees, it may be possible that postmenopausal women can conceive, though it is very rare for them to achieve a normal full term pregnancy. In the present case also there was evidence of a fresh pregnancy during menopause as evidenced by decidual reaction of the uterus.

#### Summary

A case of choriocarcinoma following tubal pregnancy is reported along with its relevant literature.

Ectopic pregnancy commonly occurs in women of relatively younger age group while in the reported case, the patient was about fifty years old having menopause for the last one year. Decidual reaction in the uterus was a point in favour of a recent tubal pregnancy after menopause.

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