ADVANCED PRIMARY OVARIAN PREGNANCY

(A Case Report)

by

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Primary ovarian pregnancy is a rare variety of extra-uterine pregnancy. The incidence quoted is 1 in 25,000-40,000 pregnancies or 0.7 to 1.07 per cent of all ectopic pregnancies (Hertig) or 1 in 117 ectopic pregnancies[2]. Guixo H. L. and Pena H. J. (1958)[1] have given a review of world literature. The above authors collected from the world literature 268 cases as authenticated and have added one of their own. In their own statistics the incidence was 0.32%. Since then many more cases have been reported in the literature. In the Lady Goschen Hospital, during the seven year period (1957-1963), there were 15,663 deliveries and 103 ectopic pregnancies (including tubal, abdominal and broad ligament pregnancies), and one ovarian pregnancy.

Many of these cases terminate in the first trimester of pregnancy. Out of 237 cases studied by Guixo H. L. and Pena H. J., they found 81.3% of cases ended in the first trimester, 5% in the second trimester and 12.6% in the third trimester of pregnancy.

In the case reported below the pregnancy had gone to the third trimester, probably to full-term.

Case Report. (No. 1777/4150). B.A., a married Hindu housewife, aged 32 years, gravida IV, para III, was admitted to Lady Goschen Hospital on the 13th of March 1959 for a swelling in abdomen of one year's duration which was decreasing in size since 3 months.

Menstrual cycle was of 23 to 30 days and flow of 4-5 days' duration and painless till 2 years ago. She started menstruating 3 months after her last childbirth which was 2 years ago. Since then, she was suffering from menorrhagia and dysmenorrhoea. The date of her last menstruation was on 12th March 1959.

Obstetric History. All the previous pregnancies and deliveries were uneventful and were conducted at home. All the three children were reported to be alive. The age of her last child was 2 years.

She was a woman of average build, ill-nourished and anaemic. Cardiovascular system and respiratory system were normal. Her blood pressure was 104/90 mm. of Hg., temperature 98.4°F. and pulse 90 per minute.

Abdominal examination revealed a firm midline tumour of about 28 weeks' size of pregnancy, extending more towards the right of midline and irregular to the feel at the upper pole. There was no tenderness. Mobility was restricted in all directions. Lower border of the tumour could be defined. It was dull on percussion. There was no free fluid in the peritoneal cavity.

On vaginal examination, the cervix was hard and was directed downwards and for-

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wards; the uterus was retroverted, felt to the left of midline and was of normal size. The lower part of the tumour could be felt through the right half of pelvis at a higher level.

Speculum examination revealed a multiparous cervix. There was no bluish discoloration of cervix or vagina.

A provisional diagnosis of a solid ovarian tumour was made.

Investigations. Plain x-ray of the abdomen, anteroposterior view revealed the foetal skeleton in oblique lie with the head to the left, showing Spalding's sign and the back directed towards the pelvis (Fig. 1).

Hysterosalpingography (Fig. 2) shows an

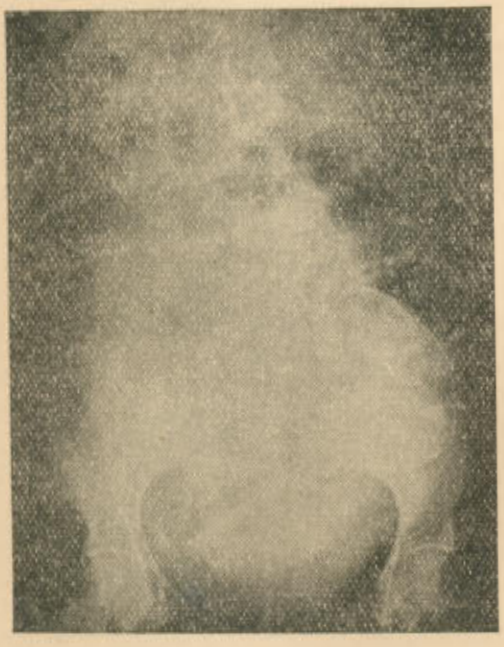

Fig. 1
Radiograph of the abdomen Anteroposterior view showing foetal skeleton.

empty uterus, left fallopian tube normal, right one showing a bulbous appearance. Blood — total red cell count 1.91 millions/ per cmm., total white cell count 9,100/cmm., dfferential count, polymorphs 25%, lymphocytes 60%, eosinophile 13% and mononuclear cells 2%.

Haemoglobin 58%. Plasma fibrinogen 578 mg. per 100 ml.

Fig. 2
Hysterosalpingography showing empty uterus.

Diagnosis of advanced abdominal pregnancy with a macerated foetus was made.

General condition of the patient was improved and she was operated on 9th April 1959.

Operation Notes. On opening the peritoneal cavity, a few ounces of blood-stained fluid escaped. Gestation sac was well above the pelvis. Omentum was found adherent at its upper pole. On releasing the omental adhesions it was found that the gestation sac had yielded at its upper end and both the legs of the foetus were protruding out. There were no other adhesions. The whole sac was delivered out of the peritoneal cavity. It had a pedicle like an ovarian cyst. The pregnancy appeared to be in the right ovary. The homolateral fallopian tube was easily identified throughout its length including its fimbrial end. It was elongated and was drawn up on the anterior surface of the sac. The ovary was not identified in the neighbourhood of the gestation sac. The sac was connected to the uterus through the utero-ovarian ligament. The pedicle was made up of fallopian tube

and ovarian ligament on the medial side and the infundibulo-pelvic ligament on the outer side. The sac was yielding at the lower end also and a part of the scalp was visible through the rent. The pedicle was not vascular. It was clamped, cut, and the sac was removed. The pedicle was ligatured and was peritonised.

On further exploration uterus was normal in size, left tube and ovary were normal. No ovary was identified on the right side. Abdomen was closed in layers.

Patient had an uneventful postoperative course and was discharged from the hospital on the 15th day after operation.

The **specimen,** measures 16 cms. in the longitudinal direction and 16.5 cms. across at its widest diameter.

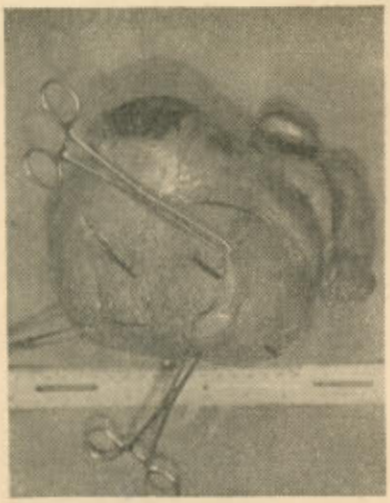

Fig. 3
Photograph of the specimen of the fallopian tube with the fimbrial end and utero-ovarian ligament.

See Fig. 3 showing the fallopian tube with the fimbrial end and utero-ovarian ligament.

Also Fig. 4 — Cut section of the specimen showing the umbilical cord.

Histopathological Report. Gross appearance of the specimen — foetus with gestation sac. Altogether 17 sections studied from different places of the mass sent.

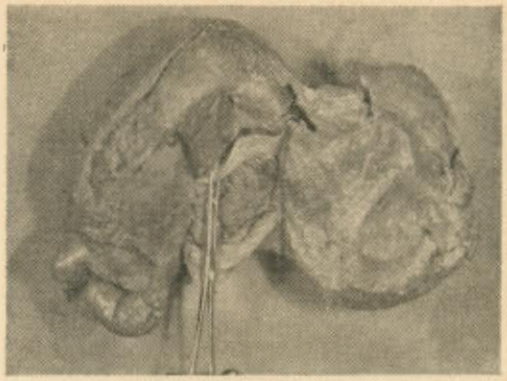

Fig. 4
Cut section of the specimen showing the umbilical cord.

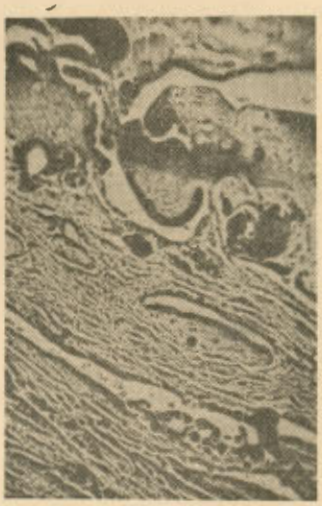

Fig. 5
Microphotograph of the section through the wall of the gestation sac showing ovarian stroma and calcified chorionic villi.

Microscopic description (Fig. 5), No. 371-77/59 — Section through the wall of the gestation sac demonstrates ovarian stroma and chorionic villi with marginal calcification in some and almost total calcifications of others (Haemotoxylin Eosin x 100).

Fig. 6, No. 371-77/59 — Section from the wall of the gestation sac at another place shows ovarian stroma extensive areas of calcification (Haematoxylin Eosin y 100).

Diagnosis — Ovarian Pregnancy.

Fig. 6
Microphotograph of a section from the wall of the gestation sac at another site showing ovarian stroma with calcification and chorionic villi.

Comment

This case fulfills the following accepted criteria for ovarian pregnancy.

(1) The homolateral tube with fimbria must be intact and separate from the pregnant ovary.

(2) The gestation sac should occupy the place of the ovary.

(3) The gestation sac should be connected to the uterus by means of utero-ovarian ligament.

(4) Ovarian tissue must be found in the wall of the gestation sac.

(5) Microscopic evidence of pregnancy should not be found in the tube (not done in this case).

In this case the patient was not aware of the fact that she was pregnant. She does not give a history of amenorrhoea or of having felt foetal movements, nor of spurious labour. Apparently the patient had gone almost to full-term and the foetus died 3 or 4 months prior to admission. She had only noticed the gradual growth of the tumour and also the shrinkage of the tumour for the last 3 months prior to admission. Hence it was diagnosed as a case of ovarian tumour.

Summary

A case of advanced ovarian pregnancy, with macerated foetus is reported.

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2. Modair, O.: J. Obst. and Gynec. Brit. 69: 655, 1962.