

## PREGNANCY IN A RUDIMENTARY HORN

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Rudimentary horn of the uterus is one of the congenital anomalies in the development of the uterus. Pregnancy in this horn is really a rare occurrence, and was first described by Mauriceau and Vassel in 1669 as quoted by Mulsow (1945). Keherer in 1900 collected 84 cases from the literature, while Beckmann in 1911 found 146 cases and Mulsow in 1950 reported 9 cases 1911, (quoted from Latto and Norman 1950), Davis (1950) says that pregnancy in a rudimentary horn is exceedingly rare.

### Case Report

Mrs. U. M., aged 17 years, was admitted to the Eden Hospital on 18-6-70 from Midnapore for acute pain in the lower abdomen from the early morning of that date following an amenorrhoea of 5 months.

She was married at the age of 12 years. Her last menstrual period was sometime in the middle of the month of Magha. (about 1st of February, '70).

### Chief Complaints

In the early morning of 18th June, while she was doing her household duties, she suddenly felt an acute pain in the lower abdomen, and fell down and became unconscious. After sometime she regained consciousness but she was unable to sit down or walk. A local doctor was called in, who advised immediate transfer of the patient to a Calcutta hospital. She had

morning sickness, vomiting, etc. during the early months of her pregnancy, and she had noticed enlargement of the breasts also.

On examination the patient was found quite conscious but was in a state of shock. Skin was cold and clammy. Her pulse was 160/min, soft — almost imperceptible. Tongue was dry. Blood pressure was 90/60 mm of Hg, while pallor was very marked. Heart and lungs showed no abnormality. Abdomen was distended. Extreme tenderness was noticed all over the abdomen, particularly in the lower abdomen. Moderate rigidity was present. Intraperitoneal fluid was detected.

Vaginal examination revealed that the fundus of the uterus could not be properly outlined. Cervix was tubular, and external os was closed. Extreme tenderness was detected in the fornices by moving the cervix. There were signs suggestive of free fluid in the pouch of Douglas. No vaginal bleeding. Provisional diagnosis was 'ruptured ectopic gestation'. Hb% was 2.5 gram per cent at the time of admission.

### Treatment

Immediate resuscitative measures were taken such as blood transfusion, inj. Morphine  $\frac{1}{4}$  gr. etc. After proper resuscitation, laparotomy was done by a sub-umbilical paramedian incision. As soon as the peritoneum was opened, blood welled out and considerable amount of free blood with clots was found. The uterus was soft and enlarged about the size of 10/12 weeks' pregnancy. As soon as the uterus was lifted up, a small mass with irregular bleeding surface came into view, which was attached to the uterus by a long thick pedicle at the lower part of the uterus. The mass was the ruptured horn about 2½" x 2" x 1"

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in size. The left fallopian tube and the left round ligament were attached to its left side, and the pedicle was attached to its right side uniting it with the uterus. The right fallopian tube and the ovary were attached to the main body of the uterus. The right ovary was enlarged and contained a corpus luteum.

The ruptured accessory horn, along with the left fallopian tube and the ovary, were removed. The ovary was removed as there was oozing from the ovary and it was considered unsafe to leave it because of the precarious condition of the patient. After removing some blood clots, the foetus and the placenta were found lying free in the peritoneal cavity. The foetus was about the size of 15.2 cm. Almost all the blood was sucked out and the abdomen was sutured in layers.

Post operative period was uneventful, and the patient was discharged on the 9th postoperative day. The haemoglobin percentage was 7.2 grams per cent on discharge. Specimen was sent for histopathological report and it was found that there was no evidence of canalisation of the mass with the pedicle connecting the cavity of the uterus. There was no evidence of corpus luteum on the removed ovary.

#### Discussion

It has been stated by many authors that the rupture of the accessory horn generally occurs at the 4th month of pregnancy in about 45% of cases (Browne 1963).

Rupture of this horn in most cases was followed by severe collapse due to heavy loss of blood. In the present case also, the rupture occurred near about 4½ months of pregnancy.

Microscopic serial sections of the base of the rudimentary horn failed to reveal any lumen connecting the band with the cavity of the uterus. Moreover, the ovary, which was removed, showed no corpus luteum even on microscopical examination. The above findings are in agreement with Mahfouz (1932) and Muslow (1945) and Greenhill and Delee (1947). This is an example of 'transperitoneal transfer'

of the fertilized ovum or the spermatozoon. In the present case, the corpus luteum was on the right ovary suggesting that either transperitoneal migration of fertilised ovum or transperitoneal migration of sperm had taken place. Alternatively, the ovum discharged from the ovary may have entered the left tube by transperitoneal migration, while spermatozoon have followed the same path—the actual fertilisation taking place in the left tube.

Latto and Norman (1950) do not agree with this view of transperitoneal migration of ovum or sperm. They also stated that the corpus luteum should be on the ovary of the same side. In this particular case, the corpus luteum was on the opposite side of the ruptured horn, which proves that either the wandering fertilized ovum reached its destination or the wandering unfertilised ovum was fertilised in the fallopian tube of the affected side by the intra-abdominal wandering spermatozoon.

#### Summary and Conclusion

Pregnancy in an accessory horn does not occur so frequently as the text books state. Rupture generally occurs in the accessory horn in the middle of pregnancy and profuse abdominal haemorrhage ensues. Transabdominal migration of the spermatozoon or of the fertilized ovum can be demonstrated as there is no communication (even on microscopical examination) between the horn and uterine cavity. Formation of corpus luteum on the opposite side of the ruptured accessory horn proves that the spermatozoon had fertilized the ovum from the ovary on the side of the normal uterus, or it may prove the intra-abdominal migration of both the spermatozoon and the unfertilized ovum, which was later on fertilized in the fallopian tube of the affected side. The classical clinical fea-

