

# RUPTURE OF GRAVID RUDIMENTARY HORN OF A BICORNUATE UTERUS

(A Case Report)

by

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Rupture of pregnant rudimentary horn of a bicornuate uterus is a very rare and serious obstetric complication. During the last 13 years this is the only case amongst 42 cases (2.3%) of ectopic gestation at Central Hospital, Maligaon. According to Subhadradevi (1961) however, the incidence of rupture of pregnant rudimentary horn is about one per cent of all ectopic pregnancies. Not only its rarity but also certain special features of the present case make it worth reporting.

## CASE REPORT

Mrs. R.D., aged 32 years, para 1 and gravida 4 was admitted into the Central Hospital, Maligaon, on 13.4.1975 with the history of amenorrhoea for 5 months and pain in the lower abdomen and vomiting for last 2 days. She had a bad obstetric history. Her first and second pregnancies ended in spontaneous abortion at 12 weeks and the third went to term but the baby was stillborn. Her menstrual history was more or less normal except that the flow was slightly heavy for first few years. It is interesting to note that she never had dysmenorrhoea.

On clinical examination, the patient was of average built and nutrition. B.P. 110/70 mm of Hg. Nothing abnormal could be detected in her cardiovascular, respiratory, excretory and nervous systems. Abdominal examination revealed a soft midline swelling in the lower abdomen of the size of 20 weeks' pregnancy. There was no tenderness or rigidity. Foetal parts however were not palpable. On vaginal examination

there was no bleeding. Cervix was soft and closed. The soft swelling could be palpated through the fornices and was thought to be normal pregnant uterus. The non-pregnant horn was totally missed.

Laboratory investigations of urine, stool and blood revealed nothing abnormal.

The patient was kept in bed rest with sedatives and duvadilan (Isoxsuprine). On 16.4.75. she had a sudden attack of excruciating pain in the lower abdomen associated with vomiting and fainting. Within a few minutes she developed profound shock. B.P. came down to 60/? mm. of Hg Pulse 160/minute and feeble. Extremities cold and clammy. Temperature—36°C and she was pale and restless. Resuscitative treatment with morphine, fluid and blood transfusion, oxygen inhalation, etc. was immediately started. The abdomen was rigid and tender. The outline of the abdominal swelling could not be made out and there was fullness and dullness in the flanks. There was still no vaginal bleeding and cervix remained closed with fullness and tenderness in the pouch of Douglas. Rupture of uterus or rupture of cornual pregnancy was suspected and an emergency laparotomy was performed as soon as the patient's condition showed slight improvement.

The abdominal cavity was full of blood. The right horn of the bicornuate uterus was about the size of normal uterus with intact wall. The right ovary, fallopian tube and round ligament were normal and attached to the right side of the fundus. Ruptured rudimentary left horn was attached by a fibromuscular band about 2.5 c.m. long to the left side of the uterus. This enlarged left horn had ruptured at its left antero-lateral border discharging the small foetus into the peritoneal cavity but the cord was connected with the placenta which was still attached to the wall of the ruptured horn. The left tube, left ovary and the left round ligament were found attached to the left lateral aspect of the

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ruptured horn (Fig. 1). The ruptured left horn together with its tube and the ovary was removed by clamping, and cutting the infundibulopelvic ligament, upper part of the broad ligament and the solid tubular structure near its attachment to the right horn. The stumps were tied securely with transfixation ligature and peritonised as much as possible. After mopping up the peritoneal cavity, abdomen was closed in layers.

The postoperative period was uneventful and she was discharged from the hospital on 15th day of operation.

#### Discussion

The cavity of the rudimentary horn may communicate with that of the more developed one (Fig. 2). Or it may fail to do so due to interposition of fibromuscular tissues between the two cavities. The case reported here is an example of this variety of developmental abnormality in which the rudimentary horn was attached to the developed one by a fairly long fibromuscular band (Fig. 3).

Pregnancy in such a rudimentary horn is destined to the same fate as the tubal pregnancy and rupture of the pregnant horn is the usual termination. However, on a very rare occasion, the muscular wall of the rudimentary horn may undergo enough hypertrophy to permit the ovum to grow to term and a live baby may be born by timely caesarean section. Robinson (1946) reported an interesting case, where rupture occurred at 38 weeks and the foetus was rescued. Walvekar and Kanitkar (1973) reported four cases of advanced pregnancy in the rudimentary horn of bicornuate uterus. In the present case, the pregnancy in the rudimentary horn progressed almost silently upto 20th week and then ruptured suddenly with dramatic effects. Rupture may occur as early as 5th week of pregnancy (Duff 1956). Bhindey and

Shah (1974) observed a rupture of rudimentary horn at 24th week of gestation.

The correct pre-operative diagnosis is very difficult and is usually made only after laparotomy from the position of fallopian tube, ovary and round ligament which are attached to the lateral aspect of the gestational sac.

In the present case, the first three pregnancies must have taken place in the more developed horn having communication with cervix and vagina but two of them ended in abortion, and one in stillbirth. Helbrecht (1953) observed habitual abortion in 40 out of 95 women with bicornuate or arcuate uterus.

#### Summary

A case of ruptured gravid rudimentary horn of bicornuate uterus is reported. Its etiology, diagnosis, differential diagnosis and management are briefly discussed.

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*See Figs. on Art Paper II-III*