

## RUDIMENTARY HORN PREGNANCIES

By

MANJU CHANDIRAMANI AND USHA KRISHNA

The Rudimentary Horn of the uterus is one of the rare Mullerian duct anomalies. Its commonest clinical presentation is ruptured ectopic pregnancy. Its unusual complication can be failure of termination of pregnancy and secondary abdominal pregnancy following its rupture.

We had six cases of Rudimentary Horn Pregnancies in a period of 4 years. One of the most interesting clinical presentation was that of a primigravida who came with five months amenorrhoea with loss of foetal movements. The diagnosis of missed abortion was confirmed by Ultrasonography. The patient failed to abort inspite of using Prostaglandins—15 methyl PGF<sub>2α</sub> 1 cc intramuscularly three hourly for nine injections. In spite of good uterine contractions the patient failed to abort. The uterine contractions ceased after 30 hours. Repeat sonography showed absence of uterine outline and an extra uterine foetal shadow with absent foetal heart. The patient, however, was not in shock inspite of ruptured Rudimentary Horn, as the Prostaglandins had caused sufficient uterine contractions to prevent excessive bleeding. Exploratory Laparotomy was carried out with total removal of the foetus and the placenta. The Rudimentary Horn was excised. This patient was followed up for 2 years, and repeat laparoscopy showed a normal uterus, adhesions in the area of Rudimentary Horn, and some peritubal adhesions on the other side.

*From: Department of Obstetric and Gynaecology, K.E.M. Hospital, Bombay.*

*Accepted for publication on 29-1-88.*

Another interesting case of Rudimentary Horn was a secondary abdominal pregnancy, which was referred to the hospital following failed termination with intra-amniotic hypertonic saline. The procedure has resulted in a ruptured Rudimentary Horn, and when the termination failed, the patient was asked to continue the pregnancy. The patient reported to the hospital two months later with pain in abdomen, and on clinical examination and investigations was found to have a secondary abdominal pregnancy. Exploratory laparotomy was performed and a 1.400 kg stillborn foetus was removed. The placenta which was adherent to the posterior surface of the broad ligament was also removed. There was moderate amount of bleeding requiring one blood transfusion.

Four more cases of Rudimentary Horn during the same period had presented as ruptured ectopic pregnancy. The gestation period varied from 12-22 weeks. Exploratory laparotomy was carried out in all cases and after effective removal of the products of conception, the Rudimentary Horn was excised.

### Discussion

Mauriceau reported the first case of Rudimentary Horn Pregnancy in 1669, and there have been many cases reported thereafter, the incidence being 1:1,00,000.

The anatomical key to the diagnosis of Rudimentary Horn Pregnancy as distinct from ectopic gestation is the position of

the round ligament on the lateral side of the gestational sac. Kehrer reported a communication between the cavity of the Rudimentary Horn and Cervix of normal horn in only 15% of cases. This necessitates a transperitoneal migration of sperms or fertilized ovum.

O'Leary found the corpus luteum to be on the side contralateral to the Rudimentary Horn in 5% of cases.

The various clinical presentations depend on the extent of development of rudimentary horn, rupture being the most common complication. In Rolan *et al* series, the average duration of rupture was 21.5 weeks. The other rarer sequelae of rudimentary horn pregnancy are torsion of horn, incarceration in the cul-de-sac, missed abortion and secondary abdominal pregnancy. A rare case of progression to term without rupture, and terminated by caesarean section has been reported.

The various gynaecological presentations are progressive dysmenorrhoea in an adolescent patient, endometriosis and hematometra.

Rudimentary Horn Pregnancies can be diagnosed by laparoscopy and ultrasound. It may be associated with renal anomalies

like unilateral renal agencies, horseshoe kidney and pelvic kidney.

In the past two decades, prompt surgical intervention, improved diagnostic accumen and blood transfusions have resulted in lowering the maternal mortality from 85% to 5%. The risk of fatal outcome would justify removal of a vestigial horn even if it was an incidental finding in an otherwise healthy woman.

This paper specially emphasizes the unusual clinical presentation of Rudimentary Horn Pregnancy, that is failed induction of 2nd trimester abortion and missed abortion.

#### *Acknowledgement*

We thank Dr. G. B. Parulkar, Dean, K.E.M. Hospital, and Dr. Indira Hinduja, Head, Department of Obstetrics & Gynaecology, K.E.M. Hospital for permitting us to utilise the Hospital Data in presenting this paper.

#### *References*

1. O'Leary, J. L. and O'Leary, J. A.: *Obstet. Gynaec.* 22: 372, 1963.
2. Rolan, A. C., Choquette, A. J., Semmens, J. P.: *Obstet. Gynaec.* 27: 806, 1966.