

CONGENITAL MALFORMATION OF THE UTERUS AND REPRODUCTIVE PERFORMANCE

By

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SUMMARY

A review of congenital malformation of the uterus and obstetric outcome was made in 130 cases in Patna Medical College during the year 1976 to 1986. There were 5 cases of congenital absence of the uterus, 15 cases of uterine hypoplasia, 15 cases of unicornuate uterus, 50 cases of bicornuate uterus, 35 cases of arcuate uterus, 8 cases of subseptate uterus and two cases of uterus didelphys. In most of the cases the diagnosis was accidental except the five cases of congenital absence of the uterus who presented with primary amenorrhoea. The incidence of primary sterility, secondary amenorrhoea, repeated abortion, prematurity, repeated breech presentation and operative interference rate was high in the above mentioned cases. Out of 130 cases, (31 were cases of primary sterility), 99 conceived. Out of 151 pregnancies seventy babies survived.

Introduction

The developmental anomaly of the uterus is the result of either absence or imperfect fusion of the mullerian ducts. Minor degree of defect in fusion might alter the external or both external and internal shape of the uterus. This defect is extremely common and accidentally discovered in fertile women. Varying degrees of obstetrical problems are encountered in the anomalies of the uterus.

The aim of the paper was to study the fertility, outcome of pregnancy and labour in different types of mullerian ducts anomaly.

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Material and Methods

A total of 130 cases of different types of congenital anomaly of the uterus encountered during the year 1976 to 1986 were studied in Patna Medical College Hospital, Patna. The cases were analysed according to age, parity, obstetric performance, abortion-prematurity, malpresentation, operative interference, stillbirth, and neonatal death. Hysterosalpingography, intravenous pyelography and diagnostic laparoscopy were done depending on the cases.

Observation

The age of the patients varied between 20 to 35 years. Five cases presented with primary amenorrhoea on account of congenital absence of the uterus. Cases were categorised in Groups based on the different types of congenital anomaly.

TABLE I
Distribution of Cases According to Different Types of Congenital Deformity

Groups	Anomaly	No. of patients	No. of patients conceived	Sterility
I.	Congenital absence of uterus	5	nil	5
II.	Uterine hypoplasia	15	2	13
III.	Unicornuate uterus	15	14	1
IV.	Bicornuate uterus	50	40	10
V.	Arcuate uterus	35	35	—
VI.	Subseptate uterus	8	8	—
VII.	Uterus didelphys	2	nil	2
Total		130	99	31

TABLE II
Reproductive Performance According to Type of Congenital Malformation

Group	No. of cases	Abortion	Premature labour	Full term pregnancy
II	15	8	—	—
III	15	2	10	—
IV	50	40	24	16
V	35	8	5	30
VI	8	—	—	8
Total		58	39	54

TABLE III
Distribution of Cases According to Abnormal Presentation

Group	No. of cases	Repeated breech	Transverse
III	15	10	5
IV	50	6	8
V	35	5	1
VI	8	2	nil

Discussion

Congenital anomaly of the uterus interferes with the successful obstetric performance of a woman. Minor degree of abnormality like arcuate uterus and subseptate uterus and some cases of bicor-

nuate uterus remain undetected, if no symptom is produced. The deformity is suspected in the process of investigations of sterility, repeated abortion, repeated breech presentation and obstetric mishaps. The diagnosis, however, is confirmed by hysterosalpingography, laparoscopy and laparotomy.

The obstetric outcome has been reviewed in the present series of 130 cases. There were 31 cases of primary sterility. Conception was however impossible in 5 cases of congenital absence of the uterus.

Repeated abortion, premature labour and very high rate of perinatal mortality, totalling to 53% were encountered in the present series of unicornuate uterus. One case of unicornuate uterus presented as

TABLE IV
Distribution of Cases According to Operative Interference

Group	No. of cases	C.S.	Forceps delivery	Manual removal of placenta
III	15	7	nil	nil
IV	50	40	nil	6
V	35	2	nil	nil
VI	8	4	nil	2

TABLE V
Incidence of Perinatal Mortality Rate

Group	No. of cases	Stillbirth	Neonatal death	Perinatal mortality (%)
III	15	4	4	53
IV	50	5	6	28
V	35	nil	1	1.17
VI	8	nil	nil	—

abortion, but laparotomy had to be done for rupture of rudimentary pregnant horn of the uterus. According to Green and Harris (1976) the foetal loss in unicornuate uterus including abortion and perinatal loss were 53%. In 5 of the 15 cases unilateral kidney and ureter were present corresponding to the side of the unicornuate uterus and that of the other side were present.

Prematurity was more common in unicornuate uterus compared to bicornuate uterus (Table II). Recurrent abortion was high in both the groups. Prematurity may be prevented by encerclage operation in unicornuate uterus.

Recurrent breech presentation and transverse lie were commonly encountered in unicornuate and bicornuate uterus. This can be attributed to the shape and configuration of the uterus.

Regarding the operative interference, caesarean section rate was high in bicor-

nuate uterus and was performed for foetal salvage. Perinatal mortality rate was 28 per cent.

The obstetric efficiency was highest with arcuate uterus and perinatal mortality was 1.14%. The obstetric performance of 8 cases of subseptate uterus was satisfactory and there was no perinatal mortality.

Regarding fertility it is difficult to explain why some patients with unicornuate, bicornuate or didelphys uterus conceive and some of them fail to do so. Configuration of the uterus may not be the only factor and other causes may be operating in these cases also. Unification of the bicornuate uterus has been performed in 2 cases who were having repeated abortion, for better future prospects.

Pentti *et al* (1982) have studied the reproductive performance of 182 women

with different type of congenital malformation of the uterus. In their series 126 of the patients had total of 265 pregnancies with 66% foetal survival rate. In the present series of 130 cases, 97% conceived and out of 151 pregnancies there were 58 abortions, 23 perinatal deaths, and 70 babies survived. Accidental and late detection of congenital deformity of the uterus may be responsible for high foetal

loss. By and large early detection of the malformation of the uterus may be helpful for foetal salvage and prevention of obstetric complications.

References

1. Green, K. K. and Harris, R. E.: *Obstet. Gynaec.* 47: 427, 1976.
2. Pentti, K. H., Sepoo, S. and Paavo, P.: *Obstet. Gynaec. Surv.* 37: 627, 1982.

TABLE V
RESULTS OF TUBAL LIGATION IN PATIENTS WITH UTERINE MALFORMATION

Group	No. of cases	No. of pregnancies	No. of abortions	No. of perinatal deaths	No. of live births
I	10	12	2	1	9
II	20	25	5	3	17
III	30	35	8	4	23
IV	40	45	10	5	30
V	50	55	12	6	37

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