# METROPLASTY-FOR BICORNUATE UTERUS

by

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## Introduction

Congenital malformations of the Mullerian system like arcuate, septate, bicornuate uterus or uterus didelphys are commonly encountered. Surgical corrections are attempted only rarely. Hence it was decided to report this case and our experience of doing the operation, originally conceived by Paul Strassman in 1907.

#### CASE REPORT

'X' A moderately nourished woman of 26 reported to the Gynaec outpatient in October 1975. Her main complaint was repeated abortions for which she was approaching Doctor after Doctor. She had 4 abortions ranging from the 8th week to 16th week. During the last pregnancy which progressed upto 16 weeks she was seen by a Gynaecologist, who noted the bicornuate nature of the uterus, and suggested that an operation might relieve her from this misery.

## Menstrual History

Attained menarche at the age of 14. Cycles 4-5/30 no significant dysmenorrhoea.

## Obstetric History

She conceived one year after marriage. The pregnancy ended in an abortion of 8 weeks' duration. The abortion was complete and spontaneous. Second pregnancy 1½ years later ended in an abortion at 12 weeks. It was also spontaneous and complete. Third pregnancy 1 year later was looked after by a local Doctor. She was on hormone therapy. Same ended in an abortion at 10 weeks. Abortion was incomplete and evacuation was done. One and a half years later she was pregnant again. This time she was under the care of a gynaecologist, who treated

her with hormones and rest. Pregnancy progressed upto 16 weeks and ended in an abortion, spontaneous and complete.

Examination of the patient showed a young moderately nourished woman. Pulse rate 80/mt. Blood pressure 120/80 mms. of Hg. Cardiovascular and respiratory systems showed nothing abnormal.

Local vaginal examination showed vulva and vagina normal. Cervix was felt normal. Uterus was in midposition felt normal in size; fornices were free. Per speculum examination showed a healthy vagina and cervix.

## Investigations

Blood HB 12 G%. Blood group 'B' Rh +ve. Blood urea 22 mgm%. Blood sugar (Fasting) 78 mgm/%. Blood cholesterol 160 mgm/%, Blood VDRL was negative, Urine was clear.

A Hysterosalpingogram done revealed the bicornuate nature of the uterus (Plate 1) with patent tubes.

Unification of the bicornuate uterus was decided upon as on other etiological factor could be detected.

# Operation

Under spinal anaesthesia abdomen was opened by a right paramediam incision. Uterus was found to be bicornuate, both cornua of the same size, uterus was about 8 cms. in length and 5 cms. in breadth. Both the tubes and ovaries were normal.

A wedge portion of the myometrium with the apex near the internal os was excised and removed. The uterine cavity was exposed. The septum was further excised to expose the two cornua well. The edges of the cut uterus was then unified using continuous interlocking sutures of 00 chronic catgut for the deep portion of the uterus near the endometrium. A second layer of interrupted sutures were put with 0 chromic catgut, for the whole thickness of the myometrium and lastly 00 chromic catgut was used for the serosal layer. The abdomen was then

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closed in layers. Patient made an uneventful recovery and was discharged on the 14th day.

#### Advice at the time of discharge

She was advised to report for an hysterogram study after three months (for which she had not turned up so far). She was asked to be on oral contraceptive to avoid pregnancy for a year and to report to the hospital when she becomes pregnant.

## Discussion

Patients with bicornuate uterus may present with various symptoms, foetal wastage in the form of abortion and premature labour or gynaecological problems like menometorrhagia, dysmenorrhoea and infertility. Surgical correction is mainly indicated for habitual abortion and premature labour and rarely for unilateral haematometra. The technique of metroplasty for unification of bicornuate uterus has gone through various modification. The original east to west incision of Strassman (1907) was modified to a wedge resection by Jones and Jones (1953), as this modification carries a lesser risk of damage to the cornua of the uterus. This incision was used in the case reported. Tompkins (1962) further introduced his resection without loss of myometrium Strassman did his series of cases

by the vaginal route. But later surgeons preferred the abdominal operation as it is technically easier and less traumatising. Haig and Carapetyan (1974) suggest that the technique should be minimised solely to metroplasty. The patient should be given strict instructions not to become pregnant for an year so as to give time for perfect healing. Capraro (1974) emphasised the need to put them on oral contraceptives which help healing also.

The procedure is simple and effective. Strassman originally reported a success rate of 82.6% for habitual abortion. Greater improvement in foetal wastage upto 87% have been reported later by various gynaecologists Caproro (1968). Elective lower segment caesarian section is considered the safest mode of delivery after this operation.

#### References

- Haig, C.: Clinical Obst. & Gynec., 17: 5, 1974.
- Jones, H. W. Jr. and Jones, G. E. S.: Am. J. Obst. & Gynec., 65: 325, 1953.
- Strassman, E. O.: Fertil. & Steril. 17: 165, 1966.
- Tompkins, P.: Surgical Clinic of North America, 42: 1049, 1962.
- Capraro, V. J.: Clinical Obst. & Gynec.,
  17: 17, 1974.