

EVALUATION OF CASES WITH RECURRENT ABORTIONS

By

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SUMMARY

Ninety cases of recurrent abortions were investigated. The incidence of primary aborters were 56.67% and secondary aborters were 43.33%. The maximum of 78.89% of abortions were seen in age group of 20-29 years. Cases with 2 previous spontaneous consecutive abortions was highest (76.67%). The maximum number of abortions (38.18%) were seen in the gestation period of 8-12 weeks, followed by the gestation period of 20 weeks (37.75%). Of all cervical abnormalities cervical incompetence has showed highest incidence (91.30%). Significant growth of *E. coli* in urine culture in 18.89%, positive VDRL test in 7.78%, positive sickling in 4.45% and abnormal GTT in 1.11% cases were found. On hystero-graphic study of 25 patients commonest was funneling of internal os (20%). Following investigation and treatment, pregnancy resulted in successful live birth in 43 cases. Rest patients were still to conceive at the end of study.

Introduction

The problem of recurrent abortions is very distressing condition to a woman who is anxious to have a child (Shirodkar 1960).

In view of the fact that recurrent abortions comprises a formidable problem in obstetric practice, a clinical study was undertaken with following objectives: (1) To study in detail the clinical aspect of cases with recurrent abortions, (2) To subject these cases for various laboratory tests including hystero-graphy and to find out the causative factors for recurrent abortions, (3) To treat these cases depend-

ing on the etiological factors either conservatively or surgically, and (4) To follow up these cases far as possible to know the outcome of the given treatment.

Material and Methods

The present study was carried out in the department of Obstetrics and Gynaecology of Mahatma Gandhi Institute of Medical Sciences, Sevagram during the period from March 1985 to February 1986. A total of 90 women with history of two or more consecutive spontaneous abortions who sought medical advice following their last abortions or during pregnancy were included in the present study. A detailed clinical history taking and examination was done pertaining to pregnancy loss. Then laboratory investiga-

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tions like total haemogram, blood grouping and typing, VDRL, blood sugar estimation, urine analysis including culture and sensitivity, test of incompetency of cervical os by passing Hegar 8 number dilator and hystero-graphy particularly in nonpregnant state and vaginal cytology in pregnant state were done. These cases were treated depending on the cause and following up till end of the study or till delivery.

Results

In our series the youngest patient was 15 years and eldest was 49 years old. The maximum of 71 (78.89%) cases were in the age group of 20-29 years. There were 51 (56.67%) cases of primary type of recurrent aborter and rest were secondary type. The maximum of 69 (76.67%) cases had previous two consecutive spontaneous abortions and only 2 (2.22%) had 6 or more than 6 abortions (Table I).

TABLE I
Distribution of Number of Previous Abortions in the Series,

No. of Previous abortions	No. of cases	Percentage
2	69	76.67
3	10	11.11
4	5	5.56
5	4	4.44
>5	2	2.22
Total	90	100.00

TABLE III
Various Types of Abnormalities of Uterine Cervix

Parameters	Number of previous abortions					Total cases
	2	3	4	5	>5	
Incompetence	16	2	1	1	1	21
Cervical tear	1	—	—	—	—	1
Cervico-vaginal fistula	—	—	1	—	—	1
Total	17	2	2	1	1	23

There was one case with history of 12 midtrimester spontaneous abortions.

The total number of abortions in 90 patients were 220. The maximum number of pregnancy loss occurred in 8-12 weeks of gestation followed by more than 20 weeks (Table II).

TABLE II
Distribution of Abortions According to Period of Gestation in 90 Women

Duration of gestation in weeks	No. of abortions	Percentage
8-12	84	38.18
13-16	30	13.62
17-20	23	10.45
>20	83	37.75
Total	220	100.00

The maximum of 51 (56.67%) cases had haemoglobin between 8 to 10 gm% and only in 19 (21.11%) cases it was below 8 gm%. Our study has shown the maximum number of patients (32) were of blood group B. There was no case with Rh negative blood type. Two out of 34 cases during pregnancy showed progesterone deficiency on vaginal cytology test.

Different cervical abnormalities on clinical examination were found in 23 of our 90 patients (Table III). Seventeen of these 23 cases sought medical advice after two pregnancy loss. The results of special laboratory tests are shown in Table IV.

TABLE IV
Various Abnormal Laboratory Investigation Findings in Aborters

Laboratory Investigations	Positive cases	Percentage
1. V.D.R.L.	7	7.78
2. Significant growth in urine culture	17	18.89
3. Abnormal GTT	1	1.11
4. Sickle cell haemoglobinopathy	4	4.45

The hystero-graphic study in patients following postabortal period was done in 25 cases. The findings of these study is given in Table V.

TABLE V
Abnormalities Detected in Hysterographic Study

Type of abnormalities	No. of cases	Per cent
1. Hypoplasia	2	8.0
2. Unicornuate	1	4.0
3. Arcuate	2	8.0
4. Bicornuate	1	4.0
5. Septate	1	4.0
6. Funneling of os	5	20.0
7. Congenital elongation of cervix	3	12.0
8. Retroverted uterus	2	8.0
9. Submucus fibroid	1	4.0
10. Ovarian cyst	1	4.0
11. Normal	11	44.0

Follow Up

Ninety cases were investigated and treated as required in present series either during pregnancy or following abortion. In 25 cases hystero-graphic study could be done. Thirty four patients were investigated during pregnancy and seventeen of these 34 were treated by cervical encirclage operation. All seventeen continued pregnancy and 13 of these delivered at term and 2 delivered preterm alive babies. Remaining two were still continuing pregnancy at the end of the study. Rest 17 of 34 and 9 from the patients who

again conceived following hystero-graphy had uneventful pregnancy following treatment.

Discussion

The highest incidence of abortions were observed in the age group of 20-29 years accounting for an incidence of 78.89 per cent. Similarly Pandya (1965), Poland *et al* (1981) have reported the highest incidence of abortion in 43.3% and 59% respectively in same age group. Higher incidence of abortions in younger age group could be explained on the basis of the fact that our institute is situated in rural area and deliver its services to scattered rural population. As per social customs and belief rural women get married at an early age and seek medical advice earlier if recurrent abortion occur. This explains in the same way the higher incidence (76.67%) of cases with 2 previous abortions in our series.

The higher trend in number of abortions in different period has got two extreme ends. One during 8-12 weeks of gestation and other during 20 weeks and above (Table III). Lauristen (1976) opined that foetal chromosomal abnormalities account for about 55% first trimester abortion. Mann (1959) and Shirodkar (1960) have opined that the cervical incompetence was responsible for late abortions. Thus, the present study believes that chromosomal abnormality in early

abortions and cervical incompetence in late abortions may be the cause of high frequency of abortions at two extreme ends of gestation periods.

Laboratory investigation revealed that VDRL test was positive in 7.78% of cases. Available literature has shown controversial views regarding abortions due to syphilis (Trichese, 1973; Dipple, 1944 and Harter and Benirschke, 1976).

Significant bacteriuria of 18.89% were found in our study. Reports of study in this field is controversial. Workers like Low *et al* (1964) denied the correlation of bacteriuria and pregnancy loss but other workers (Smith *et al*, 1964; Elder and Hendricks, 1983) have found a high correlation between bacteriuria and mid-trimester pregnancy loss. This is due to the endotoxin from gram negative bacteria enhances the uterine irritability and causes uterine decidual necrosis and lysosomal rupture and prostaglandin release thus causing abortion. The associated pyelonephritis with hyperpyrexia can be a contributing factor for abortion.

Abnormal glucose tolerance test was found in one case in present series. Similarly Upreti *et al* (1978) reported one case with abnormal G.T.T. in their group of recurrent abortions. Craine (1981) in his study of gestational diabetes had concluded that routine glucose tolerance testing is not indicated in patients with recurrent abortions as he found more or less similar incidence of recurrent abortions in gestational diabetes (10.6%) as well as in control group (9.1%). As our findings of 1.11% of abnormal GTT was low it can't be taken as contributing cause of recurrent abortion. But it is suggested that further study in this field is required for exact elucidation of present findings.

In our study of hystero-graphy 56% of

cases showed one or more abnormal findings (Table V). Palmar *et al* (1965) had reported hystero-graphic abnormalities in 85% cases and 63% cases in two series of patients of recurrent abortions. Our series is comparable to second series of Palmar *et al* (loc cit). Hystero-graphic abnormalities like funneling of internal os, retroversion, hypoplastic uterus, septate uterus and submucous fibroid are definite contributory factors causing recurrent abortion (Shirodkar, 1960; Jaffcoate, 1975 and Heinonen *et al*, 1982). There was one case of tubercular endometritis on hystero-graphic study. Hafeez *et al* (1973) blame lowered resistance during post abortal period as a factor which make the woman of recurrent abortion prone for tubercular infection but the reverse may not be true.

Therefore, we feel that even in absence of highly developed and sophisticated technique like chromosomal studies and HLA typing of couples, a thorough clinical evaluation assisted by hystero-graphy could be of immense help to a distressed woman handicapped by recurrent abortions, by guiding the attending obstetrician for choosing one's line of treatment.

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