

FETOMATERNAL HAEMORRHAGE IN ABORTIONS

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SUMMARY

A study was undertaken to evaluate the incidence of transplacental haemorrhage (T. P. H.) in different types of abortions. One hundred sixty-five patients undergoing a spontaneous or induced abortion were evaluated for T. P. H. Induced abortions (M. T. Ps) were found to have higher incidence of T. P. H. than spontaneous abortions. Amongst second trimester M. T. Ps extra-amniotic emecredil instillation was found to have the least incidence of T.P.H. (22.7%) whereas aspirotomy had the highest incidence (63.63%). The incidence of T. P. H. in patients undergoing a post-abortion curettage was higher than those who did not.

INTRODUCTION

Numerous studies have demonstrated the presence of erythrocytes in the maternal circulation after abortion. However, not many studies have determined the incidence of transplacental haemorrhage (TPH) that takes place with different abortion processes.

The aim of the present study was to study the incidence of transplacental haemorrhage in spontaneous abortion and induced abortion and to correlated it with method of medical termination of pregnancy, gestational age and associated curettage.

MATERIAL AND METHODS

One hundred sixty-five patients undergoing an abortion process either spontaneous or induced were evaluated for transplacental haemorrhage. The number of cases in each group are shown in Table I.

All maternal blood samples were collected in E. D. T. A. bulbs before and within 2 hours of the procedure.

The cytochemical method used to evaluate transplacental haemorrhage was the one devised by Nieurhaus and Betke (1968) since this is a better method for detecting small amounts of leak especially that takes place before 12 weeks.

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RESULTS

Our findings in Table I suggest a high

Table I

Comparison of types of abortion and incidence of Transplacental haemorrhage (TPH)

| Type of abortion | n | No. of cases with TPH | |
|----------------------|--------------------------------------|-----------------------|------------|
| Spontaneous abortion | 1st trimester | 22 | 1 (4.6%) |
| | 2nd trimester | 48 | 3 (6.3%) |
| 1st Trimester MTP | Suction evacuation | 45 | 5 (11.11%) |
| 2nd Trimester MTP | Extra-amniotic emcredil | 22 | 4 (22.72%) |
| | Intra-amniotic 20% hypertonic saline | 13 | 5 (38.56%) |
| | Carboprost I. M. | 4 | 1 (25%) |
| | Aspirotomy | 11 | 7 (63.63%) |
| | | | 5.7% |
| | | | 34% |

A study was undertaken to evaluate the incidence of transplacental haemorrhage (T.P.H.) in different types of abortions. One hundred sixty-five patients undergoing spontaneous abortions. However, the type of second trimester procedure had a bearing on the incidence of transplacental haemorrhage with aspirotomy having the maximum incidence of 63.63% and ethacridine lactate the highest than those who did not.

Table III

Induction interval and incidence of Transplacental haemorrhage

| Type of abortion | Curettage | | Method of 2nd Trimester MTP | Induction-abortion interval | |
|----------------------|--------------|---------------|--------------------------------------|-----------------------------|--------------------|
| | not done | done | | Less than 24 hours | More than 24 hours |
| Spontaneous abortion | 1/34(2.94%) | 3/36(8.33%) | Extra-amniotic Emcredil | 0/13(0%) | 4/9(44.44%) |
| 1st Trimester MTP | 1/20(5%) | 4/25(16%) | Intra-amniotic 20% Hypertonic Saline | 1/4(25%) | 5/9(55.56%) |
| 2nd Trimester MTP | 4/22(18.18%) | 13/28(46.43%) | I. M. Carboprost | 1/4(25%) | — |
| Total | 6/76(7.9%) | 20/81(24.7%) | Total | 2/21(9.5%) | 9/18(50%) |

least with 22.7%.

Table II shows that the incidence of transplacental haemorrhage was increased where curettage was performed for incomplete abortion (24.7%) as compared with 7.9% where curettage was not done.

Table III suggests that when analysing second trimester medical termination of pregnancies where the induction abortion interval was more than 24 hours the incidence of transplacental haemorrhage was also increased.

DISCUSSION

Earlier studies by Matthews et al (1969) and Litwick et al (1970) have suggested higher incidence of transplacental haemorrhage in second trimester medical termination of pregnancy as compared to those done in first trimester or in spontaneous abortions. The present study confirms this observation. However, what our study emphasises is that amongst second trimester procedures aspirotomy has the highest incidence of transplacental haemorrhage. Our study demonstrates that extraamniotic ethacridine lactate has the least incidence of T.P.H. and therefore be recommended as a procedure of choice

for second trimester medical termination of pregnancy in Rh negative mothers.

Patients with post-abortal curettages had a high incidence of transplacental haemorrhage so also patients undergoing aspirotomy. This amply suggests that trauma to the placental site could result in an increased leak and subsequently a higher incidence of transplacental haemorrhage. It was also found that as the induction abortion interval was increased the incidence of transplacental haemorrhage also increased. This in all probability is as a result of fetal R. B. Cs. being in contact with the disrupted maternal bed for a longer period of time resulting in an increased fetomaternal leak.

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INTRODUCTION

The prevalence of sexually transmitted diseases (STDs) has increased in the last few years. Recently it has attracted global attention because of their implication of carcinogenesis and some pathogens are in epidemic form. The exact magnitude of the problem in developing countries are not feasible as the STD clinics in most of the

countries are few and far between. STDs not only affect the individual but their progeny too. Misconception and stigmatis are more common in Syphtis. The present study is designed to carryout the prevalence of STDs among antenatal clinic attenders in the out patient dept. of S. R. N. Hospital.

MATERIALS AND METHODS

The study was carried out in the year 1988-89 and a sample size of 250 pregnant

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