

**Prospective Observational Study of Maternal and Perinatal Outcome in Women with Threatened Abortion**

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**Abstract**

**Background:** Threatened abortion is the commonest complication of pregnancy, which affects in 20-25% of all pregnancies. Hence pregnancies associated with threatened abortion should be considered seriously and should be followed up meticulously.

**Materials and methods:** present study was prospective observational study at Panna Dhai Mahila Chikitsalaya Udaipur from jan-2018 to Dec-2018. 62 cases formed the study group and 55 cases formed control group matched for age, parity, BMI, gestational age.

**Results:** pregnancies with threatened abortion was found with increased risk of spontaneous abortion, premature rupture of membrane, prematurity, low birth weight, out of 62 cases of study group spontaneous abortion were found in 21%, while in control group 5.45%, premature rupture of membranes in study group 20.41% while in control group 3.85%, preterm labour in study group 28.5%, while in control group 9.6%, most of cases (64.5%) from Rural areas. There was no statistically significant difference between two group in regards to antepartum hemorrhage, pregnancy induced hypertension, intrauterine growth restriction, perinatal mortality, congenital malformation.

**Conclusion:** pregnancies associated with threatened abortion are increased significant risk for spontaneous abortion, prematurity, premature rupture of membrane, and low birth weight. So that such pregnancies needed more serious prenatal care. So that timely intervention carried out.

**Introduction**

Threatened abortion is the commonest complication of pregnancy, which affects in 20-25% of all pregnancies. This complication of early pregnancy has been associated with several adverse maternal and perinatal outcome. Hence pregnancies associated with threatened abortion should be considered seriously and should be followed up meticulously. So that satisfactory maternal and perinatal outcome achieved.

**Materials and Methods**

Present study was prospective observational study on maternal and perinatal outcome in women with threatened abortion at Panna Dhai Mahila Chikitsalaya Udaipur. This study was done for the one year from jan-2018 to Dec-2018. 62 cases formed the study group and 55 cases formed control group matched for age, parity, BMI, gestational age.

**Results**

Table 1: Comparative Characteristics Of Both Groups at the Time

Characteristics	Study (n=62)	Control (n=55)	P Value
Mean Age	23.85±3.48	23.78±3.07	0.86
Mean BMI	20.67±1.26	20.53±1.43	0.57
Mean Gravidity	1.85±1.02	1.89±0.98	0.84
Mean Gestational Age at Booking	11.21±3.23	11.23±3.38	0.77

The women of the both group did not have any significant differences in age, gravidity, body mass index (BMI) or gestational age at booking.

Table 2 : Age Distribution In Both Groups

Age	Study (n=62)	%	Control (n=55)	%	Total	P Value
≤ 20	11	17.74%	9	16.36%	20	
21-25	37	59.68%	33	60.00%	70	
26-30	11	17.74%	11	20.00%	22	
31-35	3	4.84%	2	3.64%	5	
Total	62	100%	55	100%	117	
Mean Age ± S.D.	23.85±3.48		23.78±3.07			0.86

The mean age of patients in study group was 23.85±3.48 years and 23.78±3.07 years in control group. The difference of mean age between the groups is not statistically significant (P value = 0.86).

Table 3 : Distribution of Gravidity in both groups

Gravidity	Study (n=62)	%	Control (n=55)	%	P Value
1	28	45.16%	24	43.64%	
2	21	33.87%	18	32.73%	
3	8	12.90%	8	14.55%	
4	4	6.45%	5	9.09%	
5	1	1.61%	0	0.00%	
Total	62	100%	55	100%	
Mean ± S.D.	1.85±1.02		1.89±0.98		0.84

In the study majority were either primi gravidae or second gravidae. The mean gravidity of patients in study group and control group is comparable. (P value = 0.84).

Table 4 : Gestational Age At 1st Bleeding Episode At Booking In Both Groups

POG (weeks)	Study (n=62)	%	Control (n=55)	%	P Value
6-8	14	22.58%	13	23.64%	
9-12	25	40.32%	22	40.00%	
13-16	19	30.65%	16	29.09%	
17-20	4	6.45%	4	7.27%	
Total	62	100%	55	100%	
Mean Age ± S.D.	11.21±3.23		11.23±3.38		0.77

In the study, most of the patients were booked before 16 wks of gestation. The mean gestational age at time of booking in study group is 11.21±3.23 weeks and

11.23±3.38 weeks in control group and is comparable (P value = 0.77).

Table 5: Comparative Data of Antepartum, Intrapartum, Postpartum Outcomes and Congenital Malformation Studied in Both Groups

Outcome	Cases	%	Control	%	P-value
Sp. Abortion	13 (n=62)	21	3(n=55)	5.45	0.03
Low Lying Placenta	10(n=62)	16.13	2(n=55)	3.64	0.02
Placenta Praevia	1 (n=49)	2.04	0 (n=52)	0	0.98
Placenta Abruptio	3 (n=49)	6.12	1 (n=52)	1.92	0.57
PET	3 (n=49)	6.12	2 (n=52)	3.85	0.95
PROM	10 (n=49)	20.41	2 (n=52)	3.85	0.02
Preterm	14 (n=49)	28.5	5 (n=52)	9.6	0.02
LSCS	16 (n=49)	32.65	15 (n=52)	28.65	0.84
IUGR	3 (n=49)	6.12	2 (n=52)	3.85	0.95
Postdatism	3 (n=49)	6.12	4 (n=52)	7.69	0.76
Perinatal Mortality	4 (n=49)	8.16	3 (n=52)	5.77	0.91
Congenital anomaly	1 (n=49)	2.04	0 (n=52)	0	0.98
Live Birth	47 (n=49)	95.92	49 (n=52)	94.23	0.67
Birth Weight	16	32.65	7	13.46	0.03

<2.5kg	(n=49)	(n=52)	
Mean Gestational Age at birth ± SD	35.29 ± 2.11	38.11±4.77	0.0002
Mean Birth weight ± SD	2.47± 0.69	2.94±0.46	0.0001

The overall adverse pregnancy outcomes were significantly higher in women with threatened miscarriage than the control group.

Table 6 : Effect of Severity of Bleeding on Pregnancy Outcome.

Parameter	Light	Heavy	P-value
Sp. Ab.	7 (n=43) (16.28%)	6 (n=19) (31.58%)	0.035
PROM	7 (n=36) (19.44%)	3 (n=13) (23.08%)	0.78
Preterm	8 (n=36) (22.22%)	6 (n=13) (46.15%)	0.20
Birth Weight < 2.5 kg.	9 (n=36) (25%)	7 (n=13) (53.85%)	0.12

Table 7 : Pregnancy Outcome

Pregnancy Outcome	Cases (n=62)	Control (n=55)	P value
Sp. Abortion	13	3	0.03
Preterm del.	14	5	0.02
Term del.	35	47	0.0013

As observed from above table, the incidence of term deliveries were significantly higher in the control group (P value = 0.003).

Table 8 : Mode of Delivery

Mode of Delivery	Cases (n=49)	Control (n=52)	P value
Vaginal Delivery	33 (67.34%)	40 (76.92%)	0.39
LSCS	16 (32.65%)	15 (28.85%)	0.84
Total	49	52	

The mode of delivery between the two group was comparable there appeared to be no differences in the need for LSCS.

The incidence LSCS done for various indications in study group was 32.65% compared to 28.85% in control group. This difference is not statistically significant. (P value = 0.84).

Table 9 : Perinatal Outcome

Parameters	Cases (n=49)	Control (n=52)	P value
Preterm	14	5	0.02
Live Birth	47	49	0.67
Perinatal Death	4	3	0.91
Congenital Malformation	1	0	0.98

The incidence of preterm was significantly higher in the study group. But the difference was not statistically significant in live birth, perinatal death and congenital malformation.

**Conclusion**

Pregnancies with threatened abortion was found with increased risk of spontaneous abortion, premature rupture of membrane, prematurity, low birth weight, out of 62 cases of study group spontaneous abortion were found in 21%, while in control group 5.45%, premature rupture of membranes in study group 20.41% while in control group 3.85%, preterm labour in study group 28.5%, while in

control group 9.6%, most of cases (64.5%) from Rural areas. There was no statistically significant difference between two group in regards to antepartum hemorrhage, pregnancy induced hypertension, intrauterine growth restriction, perinatal mortality, congenital malformation. Pregnancies associated with threatened abortion are increased significant risk for spontaneous abortion, prematurity, premature rupture of membrane, and low birth weight. So that such pregnancies needed more serious prenatal care. So that timely intervention carried out

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