

## A Study on Pregnancy Outcome in Women with First Trimester Bleeding Per Vaginum

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**Aim:** To find out the effect of threatened miscarriage on pregnancy outcome.

**Objectives:** To find out the percentage of pregnant women with first trimester bleeding per vaginum which end up in first trimester miscarriage, second trimester miscarriage, preterm labour and full term labour.

**Materials And Methods:** A prospective study was carried out at Coimbatore Medical College Hospital, Coimbatore. Pregnant women admitted in labour ward with bleeding per vaginum during first trimester were taken up for study. 150 patients were taken up for study during the period of one year from January 2015 to January 2016. A structured proforma was used to collect information and followed till their pregnancy terminated.

**Inclusion criteria:** Singleton pregnancy upto 13 weeks with positive fetal cardiac activity.

**Exclusion criteria:** Ectopic and Molar gestation.

Information regarding age, socio economic status, gravida, details about previous pregnancies, medical disorders are received in addition to routine antenatal history and type of antenatal care received and total number of visits and timing of first booking visit.

Examination included both general and obstetrical. Basic lab investigations are done during admission. Gestational age and viability confirmed by USG and presence of subchorionic hemorrhage noted (volume of the bleed not measured). Patients are started on progesterone support and advised bed rest. Once bleeding stops repeat USG done for fetal well being then discharged and followed up.

### I. Observation And Results

**Table 1** Distribution of patients according to gravida

Gravida	Frequency	Percent	Valid percent	Cumulative percent
1	87	58.0	58.0	58.0
2	57	38.0	38.0	96.0
3	6	4.0	4.0	100.0
Total	150	100.0	100.0	

In the present study out of 150 patients 58% were primi, 38% were second gravida, 6% were third gravida.

**Table 2 :** Age distribution

Age	Frequency	Percent	Valid percent	Cumulative percent
<20	21	14.0	14.0	14.0
21-25	57	38.0	38.0	52.0
26-30	63	42.0	42.0	94.0
>30	9	6.0	6.0	100.0
Total	150	100.0	100.0	

In the present study 14% were in the age group less than 20 years. Majority (42%) were in the age group between 26 -30 year.

**Table 3:** Distribution according to the presence of sub chorionic hemorrhage(SCH)

USG	Frequency	Percent	Valid percent	Cumulative percent
Normal	123	82.0	82.0	82.0
SCH	27	18.0	18.0	100.0
Total	150	100.0	100.0	

The patients with sub chorionic hemorrhage were 18.0% (USG evidence) volume of bleed not measured.

**Table 4** Correlation between subchorionic hemorrhage(SCH), gestational age(GA) and pregnancy outcome

GA with SCH	Frequency	Abortion	Preterm delivery	Term delivery
<8 weeks	18	12	1	5
8-12 weeks	9	1	2	6

Out of 18 patients with SCH in less than 8 weeks of GA 12 ended in miscarriage, whereas in 9 patients with SCH 8-12 weeks only 1 patient had miscarriage.

**Table 5: Gestational age at the time of bleeding**

Gestational age	Frequency	Percent	Valid percent	Cumulative percent
<8 weeks	63	42.0	42.0	42.0
>8weeks	87	58.0	58.0	100.0
Total	150	100.0	100.0	

About 42% of patients had bleeding at less than 8 weeks of gestation and 58% patients had bleeding above 8 weeks of gestation.

**Table 6: Outcome of pregnancy**

Outcome	Frequency	Percent	Valid percent	Cumulative percent
Abortion 1 trimester	21	14.0	14.0	14.0
Abortion 2 trimester	6	4.0	4.0	18.0
Preterm	21	14.0	14.0	32.0
Full term	102	68.0	68.0	100.0
Total	150	100.0	100.0	

Majority of patients with first trimester bleeding (68.0%) had full term delivery, 21% had first trimester abortion, 21% of patients ended in preterm delivery and 6% had second trimester abortion.

**Table 6 Distribution according to birth weight**

S.NO	Birth weight(kg)	Frequency	Percentage%
1.	<1.5	6	4.9
2.	1.6-2.0	18	14.6
3.	2.1-2.5	33	26.8
4.	2.6-3.0	84	43.9
5.	>3.0	12	9.8
Total		123	100.0

In the present study 44% delivered babies weighing 2.6-3.0 kg.

**Table 7: Apgar At One Minute**

APGAR	Frequency	Percent	Valid percent	Cumulative percent
<5	9	7.3	7.3	7.3
5-8	87	70.7	70.7	78.0
>8	27	22.0	22.0	100.0
Total	123	100.0	100.0	

About 70% of babies had one minute APGAR between 5-8. APGAR of the babies depend on various factors like meconium aspiration, prematurity, birth asphyxia.

## II. Discussion

Although first trimester vaginal bleeding per vaginum is commonly considered as a marker of a pregnancy at risk for adverse outcomes, only a few studies have vigorously investigated the prevalence and predictors of bleeding. Estimates of bleeding prevalence in early pregnancy are imprecise and range from 7-24%. In the present study first trimester bleeding per vaginum was seen mainly in primigravida 58% as compared with various studies. According to study by Gianpaolo et al the risk of spontaneous miscarriage is related to gestational age and is significantly increased if diagnosed less than 9 weeks of gestation and affect the pregnancy outcome. In the present study out of 18 patients with subchorionic bleed in <8 week gestation 12 patients ended in miscarriage indicating that SCH in first trimester influences the pregnancy outcome.

According to Yang analysis 25% of women presented with bleeding per vaginum with increased incidence during first completed month of pregnancy where as in our study it is 18%. In Alexan study patients with bleeding at 8 weeks of gestation had increased incidence of preterm delivery, in our study out of 21 patients had miscarriage in first trimester, 1 second trimester miscarriage and 15 had term delivery. Among 123 live births 44% had birth weight between 2.5-3.0kg APGAR at one minute was 5-8 in 70% of babies in our study.

### III. Summary

The outcome of pregnancy in patients with bleeding was not influenced by age and gravida. It was seen that results were dependent on the period of gestation during which the bleeding occur and associated subchorionic bleeding. The study also reveals that the perinatal outcome is not influenced by bleeding in first trimester.

### IV. Conclusion

From the study it can be concluded that the bleeding in the first trimester was more common in primi gravid, in the age group of 26-30 years. In pregnancies less than 8 weeks associated with sub chorionic bleed there is increased risk of miscarriage. There is no effect on perinatal outcome when the patient reached term. The outcome of the fetus was not influenced by bleeding in the first trimester. Early diagnosis, bed rest, progesterone support will help in continuing the pregnancy with good fetal outcome.

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