



"PROSPECTIVE OBSERVATIONAL STUDY OF FIRST TRIMESTER VAGINAL BLEEDING IN TERTIARY CENTRE "

Dr. Akanksha Siroliya	3rd year Resident, Obstetrics & Gynaecology
Dr. Vibha Moses	Associate Professor, Obstetrics & Gynecology
Dr. Sapna Chourasia	Assistant Professor, Obstetrics & Gynecology
Dr. Deeksha Patilkar*	3rd year Resident Obstetrics & Gynaecology *Corresponding Author
Dr. Anamika linda	3rd year Resident Obstetrics & Gynaecology

ABSTRACT

More than 80 % spontaneous abortion occur in first trimester associated with bleeding and pain in abdomen. Pregnant women should be educated in the first visit of antenatal OPD itself for the symptoms like bleeding per vagina. These pregnancy should be consider as high risk for strong associations with first trimester abortion. Require antenatal care to improve the final maternal and foetal outcome. **Objective-** To study the percentage of women in first trimester vaginal bleeding. **Method-** This prospective study was carried out by institute from October 2021 to November 2022 .320 patients were included with a history of bleeding per vaginum with urine pregnancy test positive and less than 12 week of gestation. **Conclusion-** Bleeding in first trimester of pregnancy is the common complaint with which the pregnant women presents to hospital. The commonest cause is the threatened abortion. Other causes are incomplete, complete and missed abortions. Bleeding in early pregnancy may be early presentation of a serious situation like ectopic pregnancy. Ultrasonography, especially the Trans Vaginal is important to identify the causes of bleeding per vaginum. **Result-** Most patients were in the age group of 21-25 years (46.4%) with P value of <0.05 . Least number of patients were in the age group of more than equal to 18 years (9.1%) Majority of patients were having BMI of 18.6 to 24. patients were literate are 67.81% and 60% cases were primi. A total of 65 (23.31%) patient aborted in 1st trimester rest 255 (79.68%) rest had continued pregnancy. Least number of abortion observed (10% -P value <0.05) in Gestational age 11-12 weeks In this study, the evaluation by ultrasound was considered as the first necessary action for diagnosis of the cause of bleeding.

KEYWORDS : Bleeding per vagina, First Trimester, pregnancy, threatened abortion

INTRODUCTION

Pregnancy is a precious event in a woman's life. Most of women experience the beauty of creating and giving birth to the child. First trimester Bleeding in the very beginning of pregnancy causes emotional disruption in a woman's life. Despite the outcome of the pregnancy, first trimester bleeding during pregnancy is alarming sign. Nearly 16- 25% of all pregnant women came in hospital with complain of vaginal bleeding during their first trimester First trimester vaginal bleeding is one of the most common obstetric problem in pregnancy and also commonest cause of emergency admission.

Major causes of first trimester vaginal bleeding are implantation bleeding, miscarriage, ectopic pregnancy and cervical pathology. It often causes anxiety for both care provider and care seeker about pregnancy outcome as half of the pregnancy will result in abortion and other half will continue till term. Threatened miscarriage is diagnosed on the basis of documented foetal cardiac activity on ultrasound with a history of vaginal bleeding in presence of closed cervix.

In majority of cases of threatened miscarriages, the bleeding is of unknown origin & usually slight which is confirmed on Ultrasonography. Outcome is likely to be affected by gestational age, various cause of first trimester bleeding includes obstetrics and non-obstetrics causes.

METHODS-

In the present study, cases of first trimester vaginal bleeding had been enrolled and followed up regularly. Pregnant women who seek hospital assessment for first trimester Vaginal bleeding less than 12 weeks of Gestation were the

subjects for study with a view to evaluate the outcome of pregnancy following close antenatal along with until pregnancy outcome. For all cases sociodemographic parameters, obstetrics history , period of Gestation, duration of Bleeding sonographic findings and pregnancy outcome related data were collected through self-administered structured questionnaire. Ultrasonography was done to note crown rump length, gestational sac, yolk sac, fetal pole and cardiac activity.

Patients were selected based on the following selection criteria.

Inclusion Criteria

- 1) Amenorrhea of < 3 month (< 12 Weeks of gestation)
- 2) Positive urinary pregnancy test (Intrauterine pregnancy confirmed by USG)
- 3) Bleeding per vagina.

Exclusion Criteria

1. History of intake abortification Pills.
2. All non-obstetric cause of vaginal bleeding.
3. All patients with more than 12 completed weeks of pregnancy
4. Patient with missed, incomplete and complete abortion.
5. Patient with ectopic pregnancy hydatiform mole, history of anticoagulant treatment.
6. Diabetes, hypertension, cardiovascular diseases, hepatic diseases and hematological disorders.

RESULTS-

Table1: Sociodemographic characteristics of study population

Characteristics		Count	Percentage
AGE	>= 18	29	9.1
	21 to 25	149	46.4
	26 to 30	97	30.4
	31 to 35	45	14.1
TOTAL		320	100%
BMI	Below 18.5	98	30.6
	18.6 to 24	188	58.2
	25 to 29	34	10.7
TOTAL		320	100%
OCCUPATION	Housewives	210	65.6
	Working	98	31.8
TOTAL		320	100%
EDUCATION	Illiterate	103	32.1
	Primary	65	20.4
	Secondary	144	45.1
	Graduation	8	2.5
TOTAL		320	100%
ANC VISIT	Registered	123	38.4
	NOT Registered	197	61.6
TOTAL		320	100%
Geographical	Urban	187	58.4
	Rural	133	41.5
TOTAL		320	<0.05 significant

Table 2 shows distribution of patient according to gravida

GRAVIDA	NO. OF PATIENTS (n)	PERCENTAGE
PRIMI	192	60%
GRAVIDA 2	83	26%
GRAVIDA 3	40	12.5%
GRAVIDA 4 & 5	05	1.5%
TOTAL	320	100%
P value		<0.05 significant

Table 3 Distribution of patient according to gestational age at time of first trimester Vaginal bleeding

GA	NO. OF PATIENT CAME WITH C/O BPV IN 1ST TM	NO. OF PATIENT (n)	PERCENTAGE	PATIENT WHO ABORTED IN FIRST TM BPV	PERCENTAGE	PATIENT WHO CONTINUED IN FIRST TM BPV	PERCENTAGE
<6 week	88	25	28.40%	63	71.59%		
7-10 week	92	26	28.26%	66	71.73%		
11-12 week	140	14	10%	126	90%		
Total	320	65 patient aborted In 1st TM	23.31%	255 continued pregnancy	79.68%		

Table 4. Distribution of patient according to USG (TVS)findings at time of first episode of bleeding per vaginum

USG PARAMETER	Number of patient	Gestational sac	Fetal pole	Cardiac activity	Subchorionic hememorrhage
Present	n	308	311	276	48
	%	96.25%	97.18%	86.25%	13.75%
Absent	n	12	09	44	272
	%	3.75%	2.81%	15%	85%
Total		320	320	320	320

Table 5. Relationship between abdominal pain and vaginal bleeding in first trimester

ABDOMINAL PAIN	TYPES OF BLEEDING							
	Duration (Abdominal pain)	NO. OF PATIENTS	spotting	%	Mod erate	%	sev ere	%
<=3 DAYS	151	81	53.64 %	38	25.1 6%	32	21.1 9%	47.2%
4-7 DAYS	158	83	52.53 %	40	25.3 1%	35	22.1 5%	49.4%
>7 DAYS	11	06	54.54 %	02	18.1 8%	03	27.2 7%	3.4%
TOTAL	320	170	53.12 %	80	25%	70	21.8 7%	100%

Table 6. Relationship between abdominal pain and vaginal bleeding in first trimester

ABDOMINAL PAIN	TYPES OF BLEEDING							
	Duration (Abdominal pain)	NO. OF PATIENTS	spott ing	%	Mod erate	%	sev ere	%
<=3 DAYS	151	81	53.64 %	38	25.1 6%	32	21.1 9%	47.2%
4-7 DAYS	158	83	52.53 %	40	25.3 1%	35	22.1 5%	49.4%
>7 DAYS	11	06	54.54 %	02	18.1 8%	03	27.2 7%	3.4%
TOTAL	320	170	53.12 %	80	25%	70	21.8 7%	100%

Table 7. Distribution of patient according to Hb status of cases at time of first trimester vaginal bleeding (WHO)

Hb (gm %)	NO. OF PATIENT	PERCENTAGE
> 11	137	42.8
10-10.9	73	22.8
7-9.9	92	28.7
<7	18	5.7
TOTAL	320	100%
P value		<0.05 significant

Table 8. Distribution of cases according to management first trimester-

Trimester	MANAGMENT	NO. OF PATIENT	PERCENTAGE
First trimester abortion	Dilatation and curettage	41	12.8%
	Suction and evacuation	24	7.5%
	Conservative management	255	79%
P value			<0.05 significant

DISCUSSION

Maternal characteristics

In this study, majority of patients (46.40 %) were in age group of 21-25 years, 30.40% were above 26-30 years, 14.10% were in age group of 31-35 years and 9.10 were between 18-20 years. In study conducted by Dwivedi S (1), 67.6% were in age group of 21-30 years and 12.7% were above 30 years. The mean age in our study was 28.6±3.48 years. This is in accordance with the study of Perera BH et al (2), Average maternal age was 25.1 years. In this study, 60% of patients were prim gravida and 40% were multigravida. The results were in accordance with the study conducted by Patel NG et al (3), who found that majority of patients (66%) were multigravida. Similarly, study

conducted by Patel S et al, and Hasan R et al (4) reported that multigravida was 66% and 66.1% respectively.

Bleeding and abdominal pain characteristics

In this study, majority (43.75%) of patients presented at 11 to 12 weeks and 28.75% of patients presented at 7-10 weeks and 27.50% of patients presented at <7 weeks. This is in accordance with study conducted by Jasoliya J and Bhatia S (5), majority (93%) presented at 6 to 12 weeks and < 6 weeks were only 7%. In this study, majority of patients had spotting (53.10%), moderate bleeding (25%) followed by heavy bleeding (21.87%). In study conducted by Rai P et al (6), 70% had spotting, 20% had moderate bleeding followed by heavy bleeding (10%). This is in accordance with the study of Patel NG et al (3), majority (68%) had spotting, 22% had moderate bleeding followed by heavy bleeding (10%).

Most of the cases come with complaint of abdominal pain with spotting of duration 4 to 7 days followed by severe bleeding.

TVS

In this study 3.75% patients had absent gestational sac and 2.81% patients had absent foetal pole. Falco P, Zagonari S, Gabrielli S (12), found that in cases with threatened abortion demonstration by transvaginal sonography of an intrauterine gestational sac without an embryo may be compatible with a viable pregnancy. They suggested that these results were related with a poor outcome, with miscarriage occurring in two thirds of patients. Therefore, it can be concluded that during pregnancy first trimester bleeding is a predicting factor for obstetric and perinatal complications.

Anaemia

In this study, anaemia was present in 57.18% of patients. In study conducted by Davari - Tanha F et al (7), anemia was present in 30.8%. In study conducted by Patel NG et al (3), incidence of anaemia was 29%.

Hypertensive disorders of pregnancy

In this study, incidence of preeclampsia was 9.37% and Dwivedi S et al. (1) conducted a study on 284 patients with first trimester bleeding in which he found hypertensive disorders of pregnancy in 6.69% of patients. In study conducted by Davari-Tanha F et al (8), hypertensive disorders of pregnancy was found in 4.6% of patients. In study conducted by Lykke JÅ et al (9) gestational hypertension was found in 0.9% and preeclampsia was found in 5.2% of cases. However, Weiss JL et al, and Bahad M et al (10,11), in their study found no association between first trimester bleeding and hypertensive disorders of pregnancy.

CONCLUSION-

Bleeding in first trimester of pregnancy is the common complaint with which the pregnant women presents to hospital. The commonest cause is the threatened abortion. Other causes are incomplete, complete and missed abortions. Bleeding in early pregnancy may be early presentation of a serious situation like ectopic pregnancy. Ultrasonography, especially the Trans Vaginal is important to identify the causes of bleeding per vaginum. Pregnant women should be educated in the first visit to antenatal OPD itself for the symptoms like bleeding per vaginum and to seek help from health care workers.

REFERENCES-

- Dwivedi S, Verma K, Malhotra V, Jahan U, Gupta N, Verma S, et al. Pregnancy outcome in threatened miscarriage and correlation with USG parameters. *Inter J Recent Sci Res.* 2017;8(2):15539-43.
- Perera BH, De Silva AP, Perera H. A case-control study on the effect of threatened miscarriage on selected pregnancy outcomes. *Sri Lanka J Obstet Gynaecol.* 2009;31:34-8.
- Patel NG, Patel MS, Shah SR, Jani SK, Patel JA, Shah JU. Study of outcome of pregnancy in patients with first-trimester bleeding per vaginum. *Int J Adv Med.* 2014;1(3):230-3.
- Patel S. Pregnancy outcome of patients complicated by threatened abortion.

IOSR-JDMS. 2016;15(12):18-22.

- Jasoliya J, Bhatia S. Study of fetal outcome in cases of bleeding per vaginum in first trimester of pregnancy. *IJSR.* 2017;6(2):1543-5.
- Rai P, Kumari G, Kumari K, Jaiswal D. Evaluation of perinatal outcome in women presented with first trimester vaginal bleeding: our experience. *Inter J Reprod Contracept Obstet Gynecol.* 2017;6(3):829-32.
- Davari-Tanha F, Shariat M, Kaveh M, Ebrahimi M, Jalalvand S. Threatened abortion: a risk factor for poor pregnancy outcome. *Acta Medica Iranica.* 2008;46(4):314-20.
- Lykke JA, Dideriksen KL, Lidegaard O, Langhoff-Roos J. First trimester vaginal bleeding and complications later in pregnancy. *Obstet Gynecol.* 2010;115:935-44.
- Weiss JL, Malone FD, Vidaver J, Ball RH, Nyberg MA, Comstock CH, et al. Threatened abortion: A risk factor for poor pregnancy outcome, a population-based screening study. *Am J Obstet Gynecol.* 2004;190(3):745-50.
- Bahad M, Singh MB, Chikitsalaya M. A prospective study of outcome of pregnancy complicated by threatened abortion. *IOSR-JDMS.* 2016;15(6):20-3.
- Falco P, Zagonari S, Gabrielli S, Bevini M, Pilu G, Bovicelli L. Sonography of pregnancies with first-trimester bleeding and a small intrauterine gestational sac without a demonstrable embryo. *Ultrasound Obstet Gynecol.* 2003; 21(1):62-5.