ORIGINAL RESEARCH PAPER
Volume - 10 | Issue - 03 | March - 2021 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

ANALYSIS AND EVALUATION OF FIRST TRIMESTER BLEEDING – A RETROSPECTIVE STUDY

Obstetrics & Gynaecology

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ABSTRACT

Introduction : About one fourth of pregnant women present with bleeding in the first trimester .The four major sources of nontraumatic bleeding in early pregnancy are ectopic pregnancy, miscarriage (threatened, inevitable, incomplete, complete), implantation of the pregnancy, cervical, vaginal, or uterine pathology (eg, polyps, inflammation/infection, trophoblastic disease). Although 50% of cases presenting with vaginal bleeding continue to have a normal healthy pregnancy, but the maternal anxiety about risk of miscarriage should be assessed and counselled. The present study is an overview of etiologies and evaluation of bleeding upto 12 weeks of gestational age.

Aim: To evaluate the incidence and etiology of first trimester bleeding.

Objective: To correlate the association between first trimester bleeding and miscarriage. **Methodology:**A retrospective study among pregnant women with first trimester bleeding was conducted for a period of 1 year at Chettinad hospital and Research Institute.Detailed History taking and pelvic examination was done for 139 patients.Specific blood investigation along with Transvaginal USG probe 3-5 MHz was performed and appropriate treatment was given.

Results: Out of 900 pregnant women attending the out patient (OP) over a period of one year, 139 patients presented with first trimester bleeding , incidence being 15.44%. The present study suggest that 41.007% women had miscarriage following first trimester bleeding . It is depicted that 20.14% of women had history of previous abortions and 12.23% had history of bleeding in previous pregnancy. The major cause of bleeding in the first trimester in our study was threatened abortion (32.37%).

Conclusion : We conclude that the present study helps in giving appropriate treatment to women presenting with first trimester bleeding . Ultrasonography plays a key role in the diagnosis of cause of bleed . Early care and close monitoring will inevitably improve pregnancy outcome .

KEYWORDS

first trimester bleeding , etiological factors , threatened abortion.

INTRODUCTION:

Bleeding from the vagina is a common obstetric situation at all stages of pregnancy. The severity ranges from insignificant episode to life threatening emergency. About one fourth of pregnant women present with bleeding in the first trimester. [2]The major causes include implantation bleeding, sub chorionic haemorrhage, early pregnancy loss, anembryonic pregnancy, infections and ectopic pregnancy.[3] However 50% of cases presenting with vaginal bleeding continue to have a normal healthy pregnancy, but the maternal anxiety about risk of miscarriage should be assessed and counselled.The clinical diagnosis is based upon the character of bleeding, association with abdominal pain followed by physical examination. Routine blood investigations and transvaginal ultrasonography will confirm the diagnosis and help in providing appropriate management.[3,11,12]

The present study gives an overview of aetiologies and evaluation of bleeding up to 12 weeks of gestational age.

Aim: To evaluate the incidence and aetiology of first trimester bleeding.

OBJECTIVE: To correlate the association between first trimester bleeding and miscarriage.

METHODOLOGY:

A retrospective study among pregnant women with first trimester bleeding was conducted for a period of 1 year (October 2019 – October 2020) at Chettinad hospital and Research Institute (CHRI).

INCLUSION CRITERIA:

- All patients with confirmed urine pregnancy test presented to OPD with complaints of bleeding/spotting in the first trimester (upto 12 weeks)

EXCLUSION CRITERIA:

- Women who had induced abortions
- All patients who are >12 weeks of gestational age .

METHOD : Detailed History taking and pelvic examination was done for all patients .Specific blood investigation was sent and Transvaginal USG probe 3-5 MHz was performed to evaluate the cause of 1st trimester bleeding.

- The data collected is statistically analysed by using SPSS version 2.0 software.

RESULTS :

Total No. of cases – 139

Table No. 1 Demographic Table

Age in Years Mean age (27.25 ±9.24)	Total No. of patients n=139	Percentage (%)
16-20	10	7.19
21-25	49	35.25
26-30	63	45.32
31-35	13	9.35
>35	4	2.87

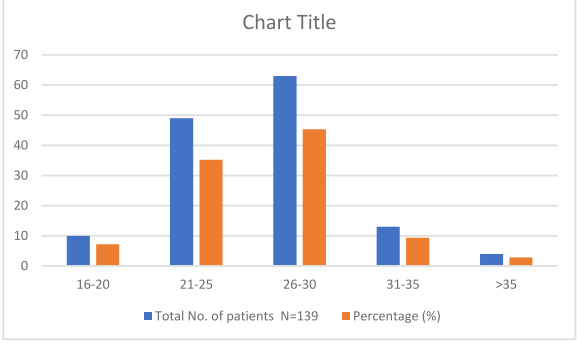


Table No.2 : Distribution of patients according to parity and number of previous abortions

Parity			Percentage(%)
0	61		43.88
1	52		37.41
2	22		15.82
>2	4		2.87

History of abortions in previous pregnancies	**Yes** 28 (20.14%)	**No** 111	
History of Bleeding in previous pregnancy	**Yes** 17 (12.23%)	**No** 122	

Table No 3: Distribution of patients according to cause of first trimester bleeding

Etiological factors	N=139	Percentage(%)
Threatened abortion	45	32.37
Incomplete abortion	34	24.46
Complete Abortion	10	7.19
Missed Abortion	17	12.23
Ectopic pregnancy	4	2.87
Molar Pregnancy	2	1.43
Anembryonic Pregnancy	6	4.31
Others	21	15.10

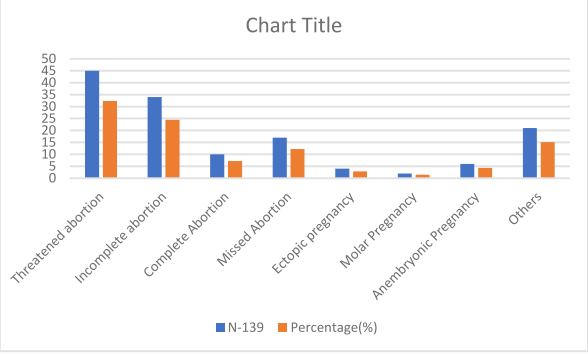


Table No. 4 : Distribution of patients according to character of bleeding .

Characteristics of bleeding		
Spotting	50 (35.17%)	
Moderate	71(51.07%)	
Severe	18(12.94%)	
Pain in abdomen	Painful	painless
	35	104
Nature of bleeding	Continuous	intermittent
	52	87

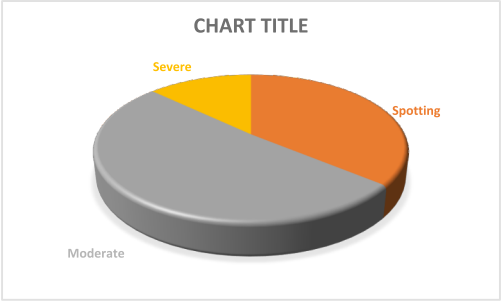
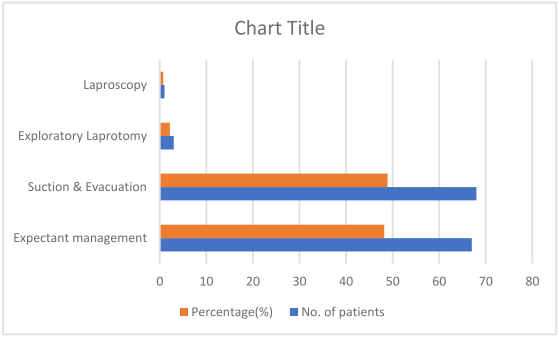


Table No. 5: Distribution of patients according to USG findings.

USG Features	No. of patients n =139	Percentage(%)
Gestational Sac	69	
Fetal pole	41	
Cardiac activity	40	
Subchorionic Hemorrhage	39	28.05
Ectopic pregnancy	4	2.87
Molar pregnancy	2	1.43
Empty uterus	10	

Table No. 6 : Distribution of patients according to mode of treatment.

Mode of Treatment	No. of patients n = 139	Percentage(%)
Expectant management	67	48.20
Suction & Evacuation	68	48.92
Exploratory Laprotomy	3	2.15
Laproscopy	1	0.719



DISCUSSION:

The source of bleeding in the early pregnancy stage is always maternal rather than fetal . A total of 139 women were enrolled with first trimester bleeding establishing the incidence as 15.44% . In our study mean age group of the patients is 27.25 ± 9.24. In the present study 12.23 % had history of bleeding per vagina in previous pregnancy and 20.14% women gave history of abortions . Out of 139 cases 61 (43.88%) were turned out to be primigravida . The pattern of bleeding in most of the cases were moderate (51.07%) intermittent in nature and was not associated with pain(as shown in table no. 4). According to our findings the most common cause of bleeding was threatened abortion (32.37 %) followed by incomplete(24.46%), missed (12.23 %) and complete abortions (7.19%).The similar trend was observed in Nandekar S et al (2020) commonest cause being threatened abortion.[1] Transvaginal ultrasonography played an important role in diagnosing the cause of bleeding and thereby helped in timely management.[6] Gupta N et al (2016) explains the accuracy of ultrasound in confirmation of diagnosis of first trimester bleeding . The current study revealed 48.20% of women were medically managed and continued the pregnancy safely , where as 48.92% patients had to undergo suction and evacuation. [8] Norwitz et al 2012 stated the similar statistics that 50 % of patients with bleeding with continue to have a normal pregnancy. [3]

CONCLUSION :

We conclude that the present study helps in giving appropriate treatment to women presenting with first trimester bleeding . Ultrasonography plays a key role in the diagnosis of cause of bleed . Early care and close monitoring will inevitably improve pregnancy outcome .

REFERENCES

1. Nandekar S, Jungari M, Dewan D, Nakade M. Observational Study of Patients Presenting with Bleeding in First Trimester. Indian Journal of Forensic Medicine & Toxicology. 2020 Oct 1;14(4).
2. Breeze C. Early pregnancy bleeding. Australian family physician. 2016 May;45(5):283-6.
3. Norwitz ER, Park JS. Overview of the etiology and evaluation of vaginal bleeding in pregnant women. UpToDate. Waltham, MA: UpToDate. 2012.
4. Hendriks E, MacNaughton H, MacKenzie MC. First trimester bleeding: evaluation and management. American Family Physician. 2019 Feb 1;99(3):166-74.
5. Barash JH, Buchanan EM, Hillson C. Diagnosis and management of ectopic pregnancy. American family physician. 2014 Jul 1;90(1):34-40.
6. Gupta N, Samariya M, Choudhary D, Yadav K, Kannoujiya P. Ultrasonographic evaluation of first trimester bleeding per vaginum. International Journal of Reproduction, Contraception, Obstetrics and Gynecology. 2016;5(9):3085-7.
7. Agarwal K, Ritu AS, Singh A, Mishra A. Obstetrical outcome of pregnancy complicated with first trimester bleeding and subchorionic hematoma. International Journal of Reproduction, Contraception, Obstetrics and Gynecology.;9(1):24.
8. Neilson JP, Gyte GM, Hickey M, Vazquez JC, Dou L. Medical treatments for incomplete miscarriage. Cochrane Database of Systematic Reviews. 2013(3).
9. Nanda K, Lopez LM, Grimes DA, Peloggia A, Nanda G. Expectant care versus surgical treatment for miscarriage. Cochrane Database of Systematic Reviews. 2012(3).
10. Sehgal A, Mehta S, Evans N, McNamara PJ. Cardiac sonography by the neonatologist: clinical usefulness and educational perspective. Journal of Ultrasound in Medicine. 2014 Aug;33(8):1401-6.
11. Jurkovic D, Overton C, Bender-Atik R; Diagnosis and management of first trimester miscarriage. BMJ. 2013: 19346:f3676
12. Dogra V, Paspulati RM, Bhatt S. First trimester bleeding evaluation. Ultrsound Q 2005;21(2):69–85
13. Fernandez H, Capmas P, Lucot JP, et al. Fertility after ectopic pregnancy: The DEMETER randomized trial. Hum Reprod 2013;28(5):1247–53.