



A PROSPECTIVE STUDY OF THROMBOCYTOPENIA DURING PREGNANCY: AN INSTITUTIONAL BASED PROSPECTIVE STUDY OF 6 MONTH

Gynecology

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ABSTRACT

Background: A prospective study of Thrombocytopenia during pregnancy: an institutional based prospective study of 6 month

Methods: It was a prospective 6 month study of pregnancy with thrombocytopenia to study the cause of thrombocytopenia and in which period of gestation these patient was diagnosed, and how much patient have severe thrombocytopenia.

Results: among 3790 deliveries, total 100 women were having thrombocytopenia. Commonest etiology was gestational thrombocytopenia 66%. 70% patient have mild thrombocytopenia, 18% moderate and 12% patient have severe thrombocytopenia. 37% patient diagnosed at 21- 28 week POG and 38% patient diagnosed at 37-42 week POG.

Conclusions: Thrombocytopenia in pregnancy may occur secondary to a variety of causes. Most of these cases occur during specific periods of gestation. Most of these have mild thrombocytopenia and conservatively managed.

KEYWORDS

INTRODUCTION

Thrombocytopenia, defined as blood platelet count below 150,000/ μ L.(1,2) It is the second leading cause of blood disorders in pregnancy after anemia.(3)Thrombocytopenia can be classified as mild (platelet count of 100,000-150,000 X 10⁹/L), moderate (platelet count of 50,000-100,000 X 10⁹/L) or severe (platelet count less than 50,000 X 10⁹/L.(1)

MATERIALS AND METHODS

Type Of Study: Descriptive Study

Study Design: Prospective study

Duration Of Study: June 2018 to November 2018

Place Of Study: Department of Obstetrics and Gynecology, SMS Medical College and Attached Group of Hospitals, Jaipur.

Study Universe: Women undergone antenatal check-up in ANC and delivered in the Department of Obstetrics and Gynecology, SMS Medical College and Attached Group of Hospitals, Jaipur.

Inclusion Criteria

- All pregnant women who have diagnosed thrombocytopenia and newly diagnosed thrombocytopenia.
- All pregnant women agree for complete blood count check-up.
- Women willing to give consent for participate in the study.

Methodology

- Pregnant women have thrombocytopenia was selected.
- Informed consent of the patient was taken prior to study.
- To control inter-observer variability same method of sample collection, same complete blood cell counter machine and same reagents, almost same antenatal prescription used and all data was observed by the investigator herself.

Baseline investigations like complete haemogram, blood group and Rh typing, urine analysis, VDRL, HBsAg and HIV serology were carried out in all patients

RESULTS

Table 1: Distribution Of Cases According To Causes Of Thrombocytopenia

C/A Of Thrombocytopenia	No. Of Patient	Percentag
Gestational thrombocytopenia	66	66%

Hypertensive disorder of pregnancy	23	23%
ITP	1	1%
Malaria	6	6%
Dengue	4	4%

Table 2: Distribution Of Cases According To Severity Of Thrombocytopenia

TYPE OF THROMBOCYTOPENIA	NO.OF PATIENT	PERCENTAGE
MILD	70	70%
MODERATE	18	18%
SEVERE	12	12%
TOTAL	100	100%

Table 3: Distribution Of Case According To POG At Which Time Thrombocytopenia Diagnosed

POG (weeks)	GT(66)	HDP(23)	ITP(1)	Malaria (6)	Dengue (4)	Total %
0-12	0(0%)	0(0%)	1(100%)	0(0%)	0(0%)	1
13-20	2(3.03%)	1(4.34%)	0(0%)	1(16.66%)	0(0%)	4
21-28	25(37.87%)	8(34.78%)	0(0%)	4(66.66%)	0(0%)	37
29-32	8(12.12%)	2(8.69%)	0(0%)	0(0%)	0(0%)	10
33-36	9(13.63%)	1(4.34%)	0(0%)	0(0%)	0(0%)	10
37-42	22(33.33%)	11(47.82%)	0(0%)	1(16.66%)	4(100%)	38

DISCUSSION

Table 1-shows that most common cause of thrombocytopenia was gestational thrombocytopenia (66 %). Around 23 % of the cases were due to hypertensive disorder of pregnancy and 1 % of cases of ITP. In a study conducted by Arora et al4 (2017), the most common cause of thrombocytopenia was GT(61%). other causes were hypertensive disorder of pregnancy(24%), ITP (2%) .These results comparable with result of present study. In another study conducted by Singh S.et al5 (2011), gestational thrombocytopenia was commonest cause (64.21 %). In present study other causes of thrombocytopenia includes, malaria (6 %), dengue (4 %). In study by Singh S.et al5 (2011), 2.11 % and Huparikar Anita et al6 (2016), 1 % thrombocytopenia due to malarial parasite infection respectively. In another study conducted by Arora et al4 (2017), 11 % cases due to malaria, 2 % cases due to dengue, Begam et al7 (2017), 2.08 % due to dengue. These results were consistent with present study.

Table 2 shows that majority (70 %) of patients in this study belongs to mild thrombocytopenia and 12 % of patients in this study belongs to severe thrombocytopenia. In another studies conducted by Asrie et al8

(2014), 74 % patient had mild and 10.3 % patient had severe thrombocytopenia and Singh et al (2011) 5, 74.7 % patient had mild and 7.4 % patient had severe thrombocytopenia, Begam et al (2017), 9.4 % patients had severe thrombocytopenia respectively. These results consistent with the result of our study.

Table 3 shows that 1% case of thrombocytopenia diagnosed between 0-12 week of gestation (first trimester), 41% case diagnosed between 13-28 week of gestation (second trimester), 58% case diagnosed in >28 week of gestation (third trimester). In a study conducted by Asrie et al (2015) 8, 24.90% case diagnosed in (first trimester), 36.90% case diagnosed in second trimester, 38.26% case diagnosed in third trimester. In a study conducted by Parnas et al (2005) 25.65 % case diagnosed <37 week of POG, 46.2% case diagnosed between 37-39 week POG, 28.1% case diagnosed 40 week or >40 week.

CONCLUSION

Thrombocytopenia in pregnancy may occur secondary to a variety of causes. Most of these cases occur during specific periods of gestation. Most of these have mild thrombocytopenia and conservatively managed.

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