

“ MATERNAL AND FETAL OUTCOME AMONG PREGNANT WOMEN WITH MILD, MODERATE AND SEVERE THROMBOCYTOPENIA.”

DR. AIMA ATHAR, International Trainee Fellow, University Hospital Birmingham, NHS UK

INTRODUCTION: **Platelets** are involved in primary haemostasis, plugging sites of endothelial damage and acting as a surface for secondary haemostasis via the coagulation pathway. The normal concentration of platelets in the blood is **1,50,000 – 4,00,000/ μ L**. **It decreases in pregnancy (215,000/ μ L)** .

Thrombocytopenia is defined as platelet count of less than 1,50,000/ μ L.

OBJECTIVE: To determine the feto-maternal outcome among pregnant women presenting with mild, moderate and severe thrombocytopenia.

METHODOLOGY

STUDY DESIGN: Descriptive case study. **STUDY PERIOD:** 1st January, 2019 to 31st November, 2019

STUDY POPULATION: All pregnant women presenting with platelet count <150 $\times$ 10³/ μ L in the Department of Obstetrics and Gynaecology, Benazir Bhutto Hospital Rawalpindi, Pakistan

SETTING: Department of Obstetrics and Gynaecology, Benazir Bhutto Hospital, Rawalpindi, a tertiary care hospital affiliated with Rawalpindi Medical University.

All antenatal women underwent complete blood picture. The women with platelet count < 150 $\times$ 10³/ μ L presenting at gestational age $\geq$ 28 weeks were included in the study. Further confirmation was done by manual platelet count. On the basis of platelet count the women were divided into three groups[1].

Maternal outcome : mode of delivery, need for platelet transfusion, postpartum haemorrhage and maternal mortality.

Fetal outcome : weight of baby with Apgar score and Neonatal Intensive Care Unit admission.

AGE	15-25 years	45	39%
	26-35 years	66	57%
	36-45 years	5	4%
PARITY	PG	44	38%
	P2-P5	59	51%
	>P5	13	11%
GESTATIONAL AGE	< 34 weeks	11	9%
	34-36+6 weeks	21	19%
	37- 40 weeks	66	58%
	>40 weeks	16	14%

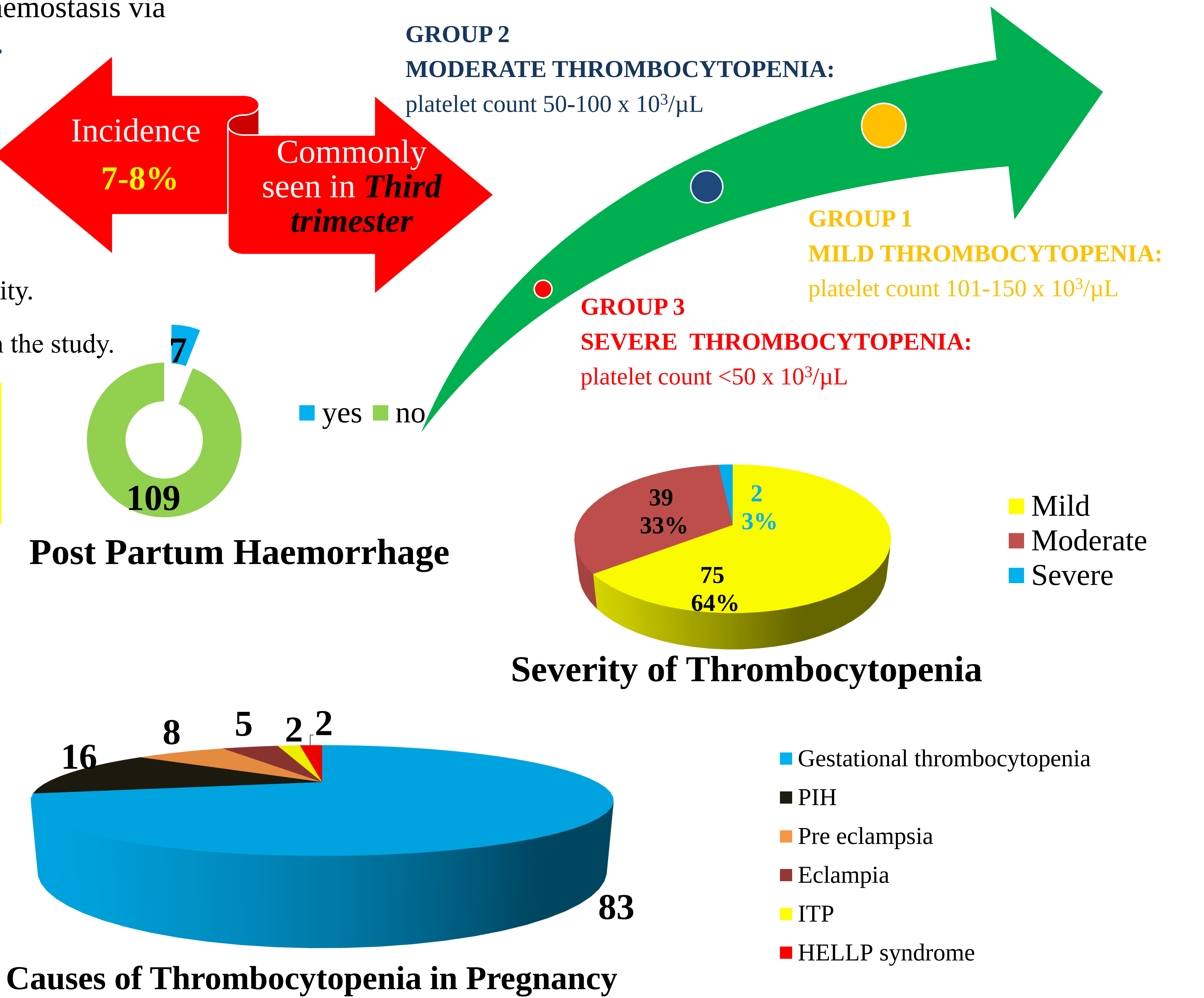
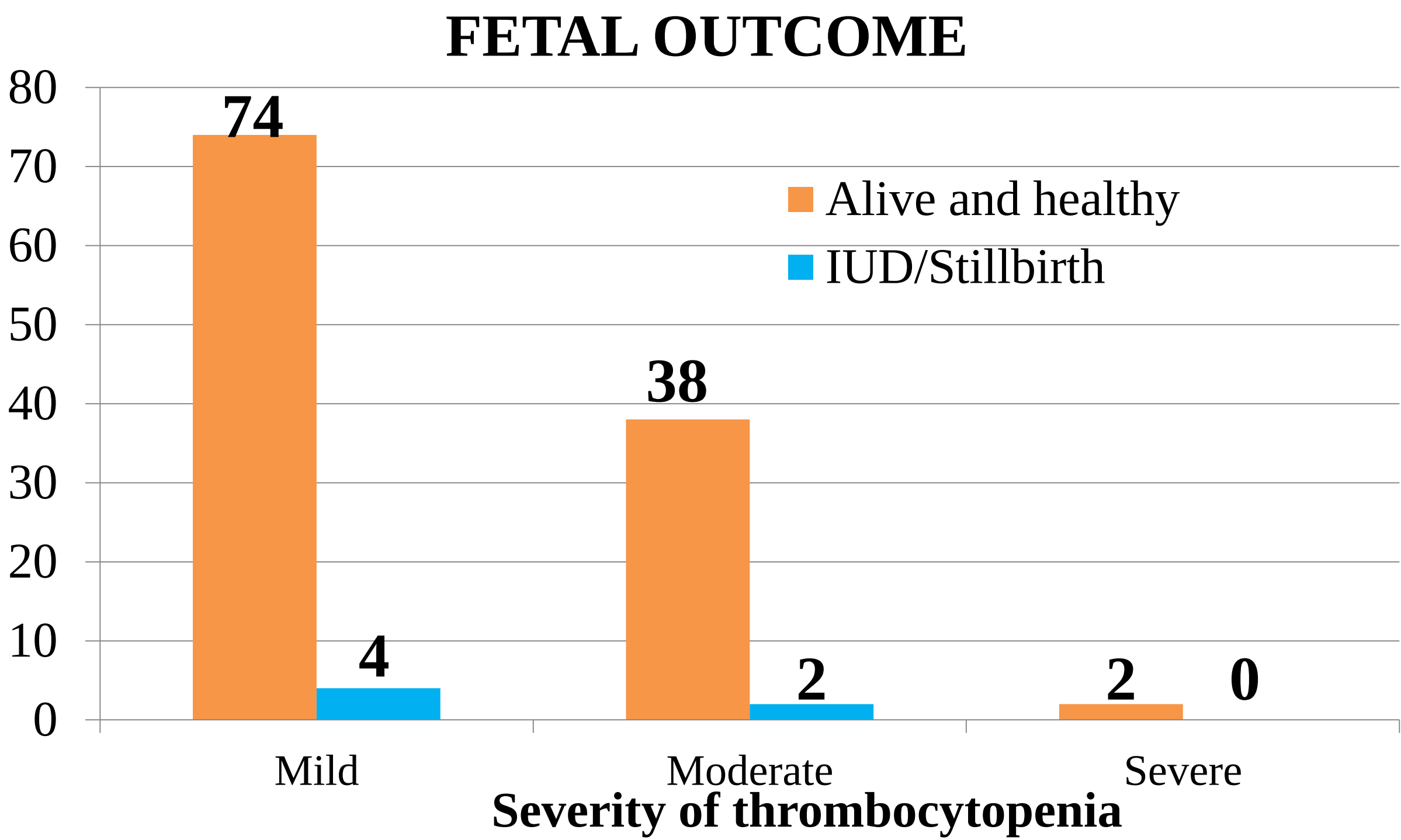
GROUPS	NEED FOR PLATELET TRANSFUSION n= 12		MATERNAL MORTALITY n= 0		Vaginal Deliveries n=7		Caesarean Sections n= 109	
MILD	0	0%	0	0%	5	6 %	70	94%
MODERATE	10	13%	0	0%	1	3 %	38	97%
SEVERE	2	100%	0	0%	1	50%	1	50%



RESULTS

n=116

A dilemma for Obstetrician



DISCUSSION : In my study, most of the women were between 26-35 years of age (57%). The average age in our study was 29.3 years, similar to study by *Borna et al*[2]. The mean platelet count was 109 x 10³/ μ L, ranging from 32000-149000/ μ L. Majority of women had mild thrombocytopenia (64%) comparable with *Chauhan V et al* (63.2%)[3]. In present study the commonest cause of thrombocytopenia in pregnancy is gestational thrombocytopenia accounting for 72% and the next leading cause is hypertension complicating pregnancy (15 %), HELLP was seen in 1% of cases ,all are consistent with results by *Chauhan V et al*[4]. In present study, need for platelet transfusion was seen in 10% (12) of the women which is similar to study by Usha Suresh (8.75%)[5]. In our study 1% neonates required NICU admissions, 26% of neonates were small for gestational age , whereas the ratio is 6% & 8% respectively by *Chauhan V et al*[6].

CONCLUSION : Most of the patients with mild thrombocytopenia do not significantly change the obstetrical management but at times severe thrombocytopenia, in life threatening conditions like HELLP syndrome, imposes a great challenge to the treating obstetrician. Gestational thrombocytopenia may not be related to adverse pregnancy outcome, thus can be treated as a benign condition.

KEYWORDS : Thrombocytopenia, Pregnancy Induced Hypertension, Pre eclampsia, Eclampsia, HELLP syndrome

REFERENCES: 1. Williamson DR, Albert M Chest. 2013;144(4):1207 2. Borna S, Borna H, Khazardoost S. Maternal and neonatal outcomes in pregnant women with immune thrombocytopenic purpura. Arch Iran Med. 2006;9(2):115-8. 3,4,5, Chauhan V et al. Int J Reprod Contracept Obstet Gynecol. 2016 Aug;5(8):2736-2743 6. J. Evid. Based Med. Healthc., pISSN- 2349-2562, eISSN- 2349-2570/ Vol. 3/Issue 82/Oct. 13, 2016