

How to Cite:

Evaluation the effect of immune thrombocytopenia in Iraqi pregnant women

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Abstract---The research aims to evaluation the effect of immune thrombocytopenia in Iraqi pregnant women and its impact on Neonatal, where 100 patients were collected from different hospitals in Iraq. This study relied on evaluating pregnant women and was based on the observations that were approved. Pregnant women were followed up until two months after giving birth, and the most complications were blood transfusion for platelet transfusion severe $<50 \times 10^9/L$ with (9) patients, and we conclude Fortunately, thrombocytopenia Pregnancy does not pose any risk to the mother or Neonatal.

Keywords---thrombocytopenia, Pregnancy, GT, mild, severe, moderate.

Introduction

Thrombocytopenia during pregnancy and in the newborn is common, as it is the second most common blood disorder in pregnancy after anemia. Although thrombocytopenia often does not have serious consequences for the mother or

fetus, but in some cases, may be associated with serious complications. Platelets are involved in primary blood clotting by filling sites of endothelial damage, and the normal platelet count is 150,000-450,000 platelets per microliter [1,2,3]

The overall rate of thrombocytopenia during pregnancy is 8-10%, and there are many causes of thrombocytopenia during pregnancy; Including (Gestational thrombocytopenia GT), (Immune thrombocytopenia ITP), (pre-eclampsia), HELLP, and some infections and other systemic diseases [4,5]

Pregnancy is one of the periods that needs special attention in order to preserve the safety and health of the pregnant woman and the health of the fetus as well until a healthy and healthy baby is born; and during this period, the pregnant woman faces a lot of trouble and temporary problems due to pregnancy, and among these problems is a lack of platelets, especially in the last trimester of pregnancy [6,7,8].

Platelets are part of the three cellular components of blood (red cells, white cells, and platelets), and their mission is to stop bleeding in cases of wounds because it helps to form a blood clot that blocks the place of bleeding, and if there is a shortage of platelets, the body will cause a lot of damage [9,10].

The pregnant woman had a miscarriage because some antibodies attacking the cells of the body due to the lack of platelets, and these antibodies may be able to cross into the placenta, and thus the fetus is at risk of miscarriage at any moment [11,12,13].

1. Premature birth.
2. Excessive and abnormal bleeding during or after childbirth and during a caesarean section if the platelet count is below 50 parts per million [14].
3. The placenta has separated or moved near the cervix [15].

The maternal antibodies are in the placenta and can cause NAIT neonatal all immune thrombocytopenia in the fetus. It is possible for newborns who suffer from NAIT to have permanent neurological sequelae, organ damage, intracranial hemorrhage, or cross the antibodies formed in the mother's placenta and viscera [16,17].

Studies have shown that there is no difference between vaginal delivery and cesarean delivery with regard to (NAIT). On the other hand, other studies showed a decrease in the platelet count of newborns after vaginal delivery compared to caesarean section, but it remains difficult to predict thrombocytopenia in newborns [18,19,20].

Material and method

This study was based on the observations that were approved in different hospitals in Iraq, for a full year, from 4-2-2020 to 9-1-2021.

All patients approved in this study were examined for a blood test with platelet count in the third trimester of pregnancy.

Pregnant women in this study were classified into three categories, where 100 pregnant women patients were collected from Al-Zahraa Hospital, and the classifications of pregnant women were based on the Degree of thrombocytopenia.

Precautionary measures have been used in cases where a pregnant woman suffers from thrombosis. All blood products are guaranteed. Platelet transfusion, also known as a platelet concentrate, is used to prevent or treat bleeding in people with low platelet count or poor function. Platelets A prophylactic transfusion is often done in those with platelet levels below $10 \times 10^9/L$. The transfusion is usually done at less than $50 \times 10^9 / L$.

Results

Table 1 – Classification according to thrombocytopenia

Classification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	* 10^9	4	3.8	3.8	3.8
	<50	21	20.2	20.2	24.0
	100-150	47	45.2	45.2	69.2
	50-100	32	30.8	30.8	100.0
	Total	104	100.0	100.0	

Table 2- Classification according to age
age * type Crosstabulation

Count

	age	Type			Total
		mild	Moderate	Severe	
	20-24.	10	6	4	20
	25-29.	5	13	7	25

	30-34.	15	6	6	27
	35-40.	17	7	4	28
Total		47	32	21	100

Table 3- Results of Complication

Complication	N	Total
The placenta separates from inner wall of the uterus before birth	4	4%
Mild	1	
Moderate	1	
Severe	2	
hematoma	2	2%
Mild	1	
Moderate	0	
Severe	1	
woman has heavy bleeding after giving birth	5	5%
Mild	1	
Moderate	1	
Severe	3	
BLOOD transfusion	18	18%
Mild	5	
Moderate	4	
Severe	9	

Figure 1- Total distribution of complication

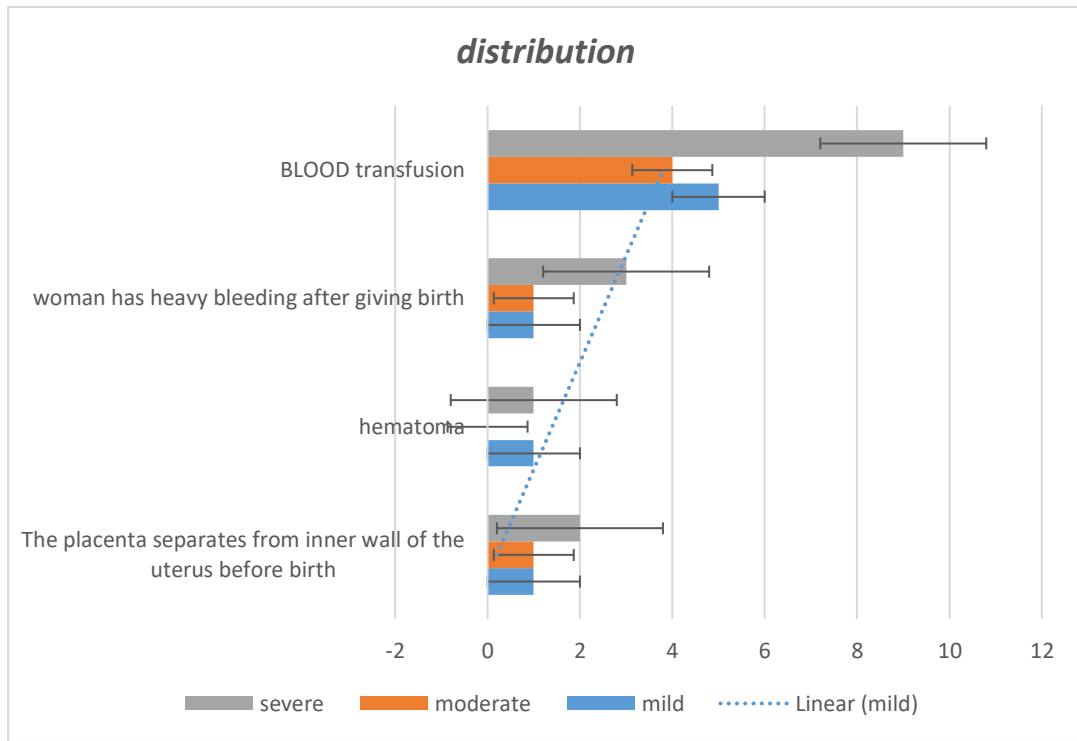


Table 4 - Result of Neonatal

age * Neonatal* type Cross tabulation

Count

Type	age		Neonatal Intensive Units	Care ventilation	Total
mild	20-24.00	4	5	1	10
	25-29.00	1	2	2	5
	30-34.00	9	5	1	15
	35-40.00	13	4	0	17
	Total	27	16	4	47
Moderate	20-24.00	6		0	6
	25-29.00	10		3	13
	30-34.00	6		0	6

		35-40.00	7		0	7
	Total		29		3	32
severe	age	20-24.00	3	0	1	4
		25-29.00	2	3	2	7
		30-34.00	6	0	0	6
		35-40.00	2	1	1	4
		Total	13	4	4	21
Total	age	20-24.00	13	5	2	20
		25-29.00	13	5	7	25
		30-34.00	21	5	1	27
		35-40.00	22	5	1	28
		Total	69	20	11	100

Discussion

One hundred patients were collected from different hospitals in Iraq for pregnant women. The study aimed at evaluating the effect of immune thrombocytopenia in Iraqi pregnant women and knowing the negative outcomes and effects on the mother and the newborn. The statistical analysis program soft spss 25 was used to analyze the patients' demographic data and information. Classification of patients into three classifications based on the Degree of thrombocytopenia, and the classifications were as follows

<50 -severe

-moderate 100-150

50-100-mild

as shown in Table 1 in the results table1.

By relying on the classification according to the age of the patients, we find that the group that was most present is between 35-40 (28) patients, and through the statistical analysis in analyzing the ages of the patients, the average value was found, and the standard regression to ages was 30.1 ± 5.6 And that the lowest value was represented with of 20 years, and the highest value was represented with 40 years as show in table 5 below

Statistics

age		
N	Valid	100
Mean		30.1300
Median		30.0000
Mode		30.00
Std. Deviation		5.64909
Minimum		20.00
Maximum		40.00

In Table 3, we note the complications found platelet transfusion, where the most complications were blood transfusion in severe $<50 \times 10^9/L$ with (9) patients. As for the other complications represented by the placenta separates from inner wall of the uterus before birth, a woman has heavy bleeding after giving birth, and hematoma was not found significantly in the patients.

When evaluating the results of the newborn, we find that Neonatal Intensive Care Units with 20 patients and ventilation with 11 symptoms may differ from one child to another, and no severe complications were found.

Conclusion

(GT) is the most common cause of thrombocytopenia during pregnancy, occurs in up to 5% of pregnant women, is benign in most cases, and does not require treatment. It was noted that (GT) occurs more frequently in pregnant women in this study; Studies have stated that the platelet count was lower in twin pregnancies than in single pregnancies, and this remains an assumption.

The exact causes of GT are still unknown, but it has been suggested that one of the reasons is the expansion of blood during pregnancy (due to excess fluid; a relative decrease in the cellular count of blood components) or due to thrombocytopenia in the placenta.

Fortunately, thrombocytopenia Pregnancy does not pose any risk to the mother or Neonatal.

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