

THE INCIDENCE AND MORPHOLOGICAL FEATURES OF THROMBOCYTOPENIA IN PREGNANCY

Dilafuz L. Zaynutdinova ¹, Shaira A. Babadjanova ²

1 Assistant, Hematology, transfusiology and laboratory work,
Tashkent medical academy, Uzbekistan
E-mail: dilafuzzaynutdinova00@gmail.com

2 Professor, Hematology, transfusiology and laboratory work,
Tashkent Medical Academy, Uzbekistan
E-mail: shairabdoc@gmail.com

ABSTRACT

The research has focused on the frequency, causes and consequences of thrombocytopenia acquired at all stages of pregnancy. The purpose of which was identification of the frequency and characteristics of thrombocytopenia at different stages of pregnancy. Clinical material for the study was obtained from 30 pregnant women aged 18-35 years who were treated from January 2021 to March 2022 in the department of pathology of pregnant women of the Tashkent Medical Clinic of the Ministry of Health of the Republic of Uzbekistan.

Key words: pregnancy, thrombocytopenia, adhesion and aggregation, bleeding.

INTRODUCTION

Concerns and study of medico-social problems of the health status of women of reproductive age is the is a major challenge of the state and public health. These problems need to be addressed on a national scale, but at the same time, specific tasks to improve their health should be determined and solved within each region, taking into account the real situation on the ground. The increase in morbidity among women of reproductive age, in particular during pregnancy, in recent years is of particular concern, as this leads to an increase in the number of various diseases and severe complications in both the mother and the child to be born [7]. A huge number of studies conducted both in Uzbekistan and abroad are devoted to the study of issues related to the characteristics of hemostasis during pregnancy, which is primarily due to the increased risk of maternal and perinatal death and

disability in the group of patients with certain deviations from the norm in the system regulation of the aggregate state of blood [8].

Important cause of maternal mortality, hemorrhages are at the leading place throughout the world, ranging from 13 to 25%. Despite the fact that the dynamics of maternal mortality in Uzbekistan has a clear downward trend [1,7], the structure of causes is identical to that in developing countries: bleeding, septic complications. The decrease in the level of maternal mortality occurs mainly due to a decrease in the number of deaths after complications of childbirth, while the decrease in the frequency of obstetric bleeding in the structure of maternal mortality is extremely slow [5,2]. In recent years, violations of hemostasis have become of particular relevance, due to the increase in their occurrence and aggravation of the course under the influence of various pathological processes and environmental factors [4,3]. The causes of hemostasis disorders are quite diverse, platelet pathology is not the last among them, which is the cause of bleeding in almost 80% of cases [6]. During pregnancy, a woman's body undergoes physiological changes in the hemostasis system associated with the appearance of the uteroplacental circulation. As the gestation period progresses, changes occur in all parts of the blood coagulation system aimed at preparing a woman for possible complications during pregnancy, childbirth and the early postpartum period [2].

Literature data seen that there has been the clinical manifestations of thrombocytopenia in 70-90% of cases are single, and only in 10-30% of patients they recur under various conditions. In some patients, they can recur under the influence of various factors at regular intervals. During pregnancy, as you know, there are significant changes in the systems of the body, an increase in psycho-emotional stress. This, in turn, causes the emergence, aggravation and aggravation of the course of immune thrombocytopenia in pregnant women [7].

World literature testifies to the combination of thrombocytopenia and pregnancy as a serious and severe condition, often ending in a sad outcome for the fetus and mother, who dies from heavy bleeding during abortion or childbirth. According to the literature of the 1920s, infant mortality was approximately 50%, and maternal mortality was almost 100% (from uterine bleeding) [3].

The increase in the number of various diseases in pregnant women, as a result of which there is a progressive degradation of their health, has contributed to the study of many of them. However, studies on the study of platelet pathology in pregnant women (clinical and laboratory features) and the development of algorithms for managing patients during pregnancy and childbirth have not been developed enough. Therefore, the problem of protecting and improving the health

of pregnant women with platelet pathology is one of the topical areas of medicine of national importance.

Purpose. Explore the detection rate and characteristics of thrombocytopenia in women at different stages of pregnancy.

Scientific novelty of the study.

1. By the method of retrospective analysis in pregnant women with hemorrhagic symptoms, the cause of bleeding associated with platelet pathology will be studied.

2. The morphological picture of platelets and the course of pregnancy in thrombocytopenia and thrombocytopathy will be studied.

MATERIALS AND METHODS.

The clinical material for the study was 60 pregnant women with thrombocytopenia, aged 18 to 35 years old, who were registered at the gynecological consultative clinic of the Tashkent Medical Clinic of the Ministry of Health of the Republic of Uzbekistan in the period from 2020-2021.

RESULTS AND DISCUSSIONS.

Studies were conducted in 60 pregnant women with thrombocytopenia who were under constant observation in the gynecological consultative clinic of the Tashkent Medical Clinic. The mean age of the patients was 26.5 ± 8.5 years. The duration of the disease ranged from 1.5 to 2 years. All 60 patients included in the study at the time of conception were in the stage of clinical and hematological remission. The study of anamnestic factors that preceded and contributed to the onset of the disease during pregnancy revealed that in 31.7% (19) of cases, the onset of the disease was associated with acute colds; 15% (9) of patients indicated that bleeding first appeared on the background of psycho-emotional and physical stress; in 30% (18) - the presence of foci of chronic infection was found, and in 23.3% (14) of the examined, the disease was detected against the background of pregnancy itself (Table 1).

Table 1.

Factors preceding the exacerbation of the disease

	Preceding Factors	Number of group pregnant women with thrombocytopenia, n=60	
		Absolute	%
	Colds	19	31,7
	Psycho-emotional and physical stress	9	15
	Chronic infection foci (tonsillitis, sinusitis)	18	30
	Pregnancy	14	23,3
	TOTAL	n=60	100%

It should be noted that in the first trimester the proportion of exacerbation of thrombocytopenia was 48% of all cases, in the second trimester - 37%, in the third trimester an exacerbation of the disease was observed in 15% of patients (diagram 1). Such differences in the exacerbation of thrombocytopenia during pregnancy may be due to the fact that in the II and III trimesters of pregnancy, the amount of corticosteroid hormones and the duration of their circulation in the maternal body during this period of gestation increase due to a slowdown in the metabolism of corticosteroids and the beginning of the functioning of the fetal adrenal glands (Diagram 1).



Diagram 1. Thrombocytopenia recurrence during pregnancy.

From the data shown in Diagram 2, it follows that in pregnant women with chronic thrombocytopenia included in the study, the number of patients with moderate and severe severity of the disease prevailed.

The number of platelets in the group of pregnant women with thrombocytopenia was $7.6 \pm 3.05 \times 10^9/l$ (Diagram 2).

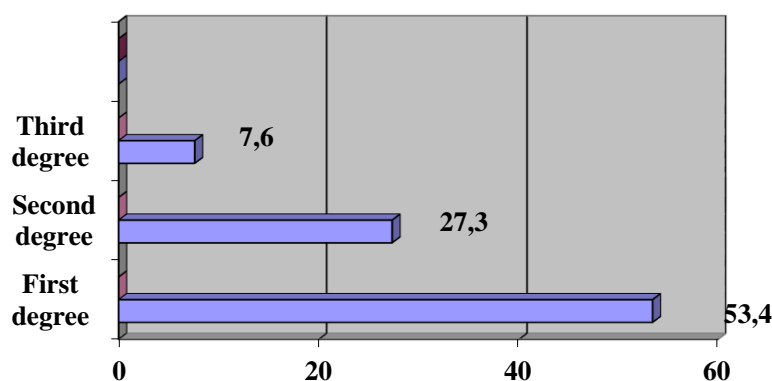


Diagram 2. The number of platelets (X109 / l) according to the severity of thrombocytopenia.

During the analysis of the dynamics of the course of pregnancy in women with immune thrombocytopenia, the following complications were identified, which are presented in Diagram 3.

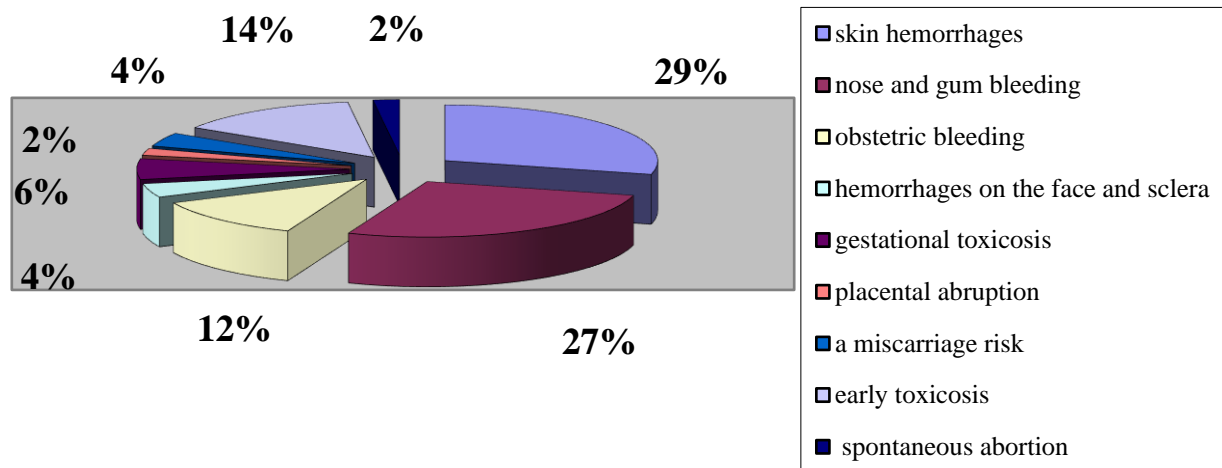


Diagram 4. The frequency of complications in pregnant women with thrombocytopenia.

The complications shown in Diagram 4 were observed in the group of pregnant women with thrombocytopenia with moderate and severe severity. From the above data, it can be seen that complications are characterized by a variety of manifestations, which were detected in the form of skin hemorrhages in 29%, nasal and gingival bleeding in 27%, obstetric bleeding in 12%, hemorrhages on the face and in the sclera in 4%, preeclampsia in 6%, threats of abortion in 4%, placental abruption in 2%, early toxicosis in 14% and miscarriages in 2% of the examined patients in the group of pregnant women with thrombocytopenia.

Thus, based on the above data, we can conclude that a dynamic clinical examination of patients with thrombocytopenia showed that the course of thrombocytopenia during pregnancy, the risk and severity of its exacerbations are determined by the stage of the disease at conception and the severity of its course, and above all, depends on the severity of the disease.

CONCLUSIONS

1. Pregnant women with thrombocytopenia are at risk for the development of hemorrhagic complications of varying severity during pregnancy, childbirth and the postpartum period;

2. Pregnancy that occurred against the background of clinical and hematological remission of thrombocytopenia in 66.3% does not lead to a significant deterioration in the course of the disease throughout pregnancy and after childbirth. Timely delivery through the natural birth canal was observed in 75% of pregnant women with mild to moderate thrombocytopenia, in 3.3% of pregnant women with severe thrombocytopenia in the 1st trimester of pregnancy, spontaneous miscarriage was observed, in 16.6% - abortion due to uterine bleeding;

3. The use of GCS at a dose of 0.5-1.0 mg/kg in 57.9% of cases led to complete clinical and hematological remission, 42.1% of patients needed to continue maintenance from 4 to 6 months at doses of 5-10 mg per day; maintenance therapy was ineffective in 9.1% of patients, who underwent premature operative delivery due to aggravated thrombocytopenia.

REFERENCES

1. Barkagan Z.S., Momot A.P. Diagnosis and controlled therapy of hemostasis disorders. Moscow: Newdiamed, 2011.
2. Dolgov V.V., Svirin P.V. Laboratory diagnostics of hemostasis disorders. M.–Tver: Triada, 2015.
3. Egorova Ya.A., Zabolotnov V.A., Rybalka A.N. Thrombocytopenic purpura during pregnancy. WOMAN'S HEALTH №5 (91)/2014
4. Kosterina A.V. Diagnosis and treatment of anemic and thrombocytopenic syndromes in pregnant women. PRACTICAL MEDICINE '8 (109) September 2017
5. Marinkin I.O., Belousova T.V., Plyushkin V.A. The role of disorders in the system of hemostasis and gene polymorphism in the pathology of the gestational process and the perinatal period. Vestn Novosibirsk State University. Biology, Klin Med 2011;9(4):106–10.
6. Momot A.P. Principles and algorithms for clinical and laboratory diagnosis of hemostasis disorders. Barnaul: ASMU, 2014.
7. Fayzullaeva N.I. Modern clinical and hemastosiological aspects of pregnancy and childbirth in women with idiopathic thrombocytopenic purpura. Tashkent. 2016.
8. Yashchuk A.G., Maslennikov A.V., Timershina I.R. The state of vascular-platelet hemostasis during pregnancy: signs of the norm and pathology. Rosvestnobshtetrician-gynecol 2010;4(10): 17–9.