

## **COMPARATIVE ASSESSMENT OF THE FREQUENCY OF CLINICAL MANIFESTATIONS IN PATIENTS WITH IMMUNE THROMBOCYTOPENIA**

**Juraeva Dilbar Erkinovna, Matkarimova Dilfuza Saburovna**  
Termez Branch of the Tashkent Medical Academy  
Tashkent Medical Academy

### **ABSTRACT**

**Objective:** To analyze and compare the frequency of clinical manifestations in patients with immune thrombocytopenia depending on the severity of the disease.

**Materials and methods:** The study included 91 patients diagnosed with ITP in medical institutions of the Surkhandarya region from 2020 to 2024. Methods included clinical, laboratory, morphological, and statistical studies.

**Results:** Manifestations of hemorrhagic syndrome were observed in almost all patients with ITP, characterized by both skin and mucosal phenomena in the form of bruises and petechiae, as well as bleeding ranging from nasal to internal and renal variants. The severity and duration of the hemorrhagic syndrome corresponded to the severity of thrombocytopenia, being more pronounced in moderate and severe forms.

**Keywords:** immune thrombocytopenia, Surkhandarya region, clinical presentation, hemorrhagic manifestations, severity of thrombocytopenia.

**Introduction:** The problem of immune thrombocytopenia (ITP), given its widespread prevalence, diverse clinical manifestations, and the risk of hemorrhagic complications, has been of particular interest to scientists for centuries [1, 2, 8, 12].

Due to the unknown etiology of ITP, until recently the disease was referred to as idiopathic thrombocytopenic purpura [3, 4, 6]. However, the currently proven immune-mediated genesis of the disease has become the basis for designating idiopathic thrombocytopenic purpura as immune thrombocytopenia (ITP), as approved by an international group of experts [10]. Previously, the threshold platelet count for diagnosis was considered to be  $150.0 \times 10^9/L$ , while according to modern diagnostic criteria, experts have proposed a level of  $100.0 \times 10^9/L$  [10].

According to foreign researchers, clinical manifestations at diagnosis are observed in 72% of patients with primary ITP and in 67% of patients with secondary ITP, mainly represented by skin manifestations (61% and 63% respectively) and nasal bleeding (17% and 24%) [5, 7, 9, 11].

**Objective:** To analyze and compare the frequency of clinical manifestations in patients with immune thrombocytopenia depending on the severity of the disease.

**Materials and methods:** The study included 91 patients with ITP aged 98 to 80 years (median age  $41.2 \pm 3.9$  years) from the city of Termez and districts of the Surkhandarya region. The diagnosis of ITP was established based on international criteria (2019), taking into account the results of clinical examination of patients and laboratory test data (complete blood count, bone marrow examination) [9]. Statistical analysis of the results was performed using the "Statistic for Windows, 2017" software package.

**Results and discussion:** In the prospective study, when assessing the clinical manifestations in patients with ITP in the main group ( $n=91$ ), attention was drawn to the presence of skin manifestations in all patients (100%) in the form of bruises of varying sizes (from 0.5 cm to 6.0 cm), at different stages (from fresh ones with crimson-red and dark blue color to older ones with greenish-yellow color).

Additionally, 79 (86.8%) of the examined patients exhibited another characteristic hemorrhagic manifestation of ITP - petechial skin hemorrhages. Point hemorrhages were also observed on the visible oral mucosa (37/40.6%).

Nasal bleeding was observed in 63 (69.2%) patients, varying in intensity from rapid spontaneous cessation (50/54.9%) to prolonged bleeding (13/14.3%).

Gingival bleeding was observed in 19 (20.9%) patients, of whom 11 (12.1%) experienced bleeding during tooth brushing or when consuming solid food (mainly fruits), while in 7 (7.7%) patients it began spontaneously and continued for 2-3 hours. Menorrhagia (lasting from 7 to 21 days) was observed in 29 (31.8%) female patients, of whom 14 (15.8%) required medication to stop the bleeding.

The clinical severity of ITP was also manifested by hemorrhagic phenomena in the eyes, ranging from pinpoint hemorrhages with a diameter of 2-3 mm (7/7.7%) to larger hemorrhages up to 1.5-2.3 cm in the conjunctiva and eyeballs (3/3.3%). Additionally, in 8 (8.8%) patients, the severity of ITP manifested as gastrointestinal bleeding (5/5.5%) and hematuria (3/3.3%).

At the time of patients' admission to medical institutions in the main group, 47 (51.6%) had manifestations of wet hemorrhagic syndrome.

Assessing the nature of hemorrhagic manifestations among patients with ITP, taking into account the degree of platelet decrease with moderate (mild) reduction ( $n=36$ , 39.6%), skin manifestations in the form of bruises of varying ages, often not exceeding 1 cm, were observed in all patients (100%), and the presence of small petechiae on the skin was detected in 24 (66.7%) patients with moderate thrombocytopenia. Among these patients, there were no hemorrhages in visible mucous membranes.

Along with the aforementioned hemorrhagic phenomena, only 8 (22.3%) patients with moderate thrombocytopenia experienced spontaneous and rapidly resolving nosebleeds. Meanwhile, 2 (5.6%) women with moderate thrombocytopenia experienced menorrhagia lasting up to 7-10 days.

Among patients with moderate ITP, episodes of gingival bleeding, internal and renal hemorrhage were not observed (see Figure 3.6).

Clinically, the severity of ITP was also manifested by the presence of hemorrhagic phenomena in the form of eye hemorrhages, ranging in size from pinpoint (2-3 mm in diameter) (7, 7.7%) to larger ones up to 1.5-2.3 cm in the conjunctiva and eyeballs (3, 3.3%). Additionally, in 8 (8.8%) patients, the severity of ITP manifested as gastrointestinal bleeding (5, 5.5%) and hematuria (3, 3.3%).

Hemorrhagic manifestations among patients with moderate-severe thrombocytopenia (n=32, 35.2%) in the form of bruises of varying ages, which were larger (up to 5 cm in diameter) than in patients with moderate ITP, were also characteristic of 100% (32) of patients in this group. Moreover, all patients with moderate-severe thrombocytopenia had petechial skin hemorrhages (32, 100%), as well as hemorrhages in the visible oral mucosa (14, 43.7%). Additionally, in one case (3.1%), hemorrhage was observed in the left eyeball.

The presence of wet hemorrhagic syndrome in the form of nasal and gingival bleeding was observed in 32 (100%) and 7 (21.9%) patients, respectively, and menorrhagia in 13 (40.6%) women with moderate-severe ITP.

In this group of patients, internal and renal hemorrhages were not observed.

Hemorrhagic skin manifestations among patients with ITP with severe thrombocytopenia (n=23, 25.3%) in the form of bruises of varying ages (reaching up to 6 cm in diameter) and skin petechiae were observed in almost all patients. The severity of thrombocytopenia was manifested by a greater intensity of hemorrhagic manifestations in the form of nasal (23, 100%) and gingival (12, 52.2%) bleeding, hemorrhages in the visible oral mucosa (23, 100%), menorrhagia (13, 56.5%), conjunctival hemorrhages (7, 30.4%) and eyeball hemorrhages (2, 8.7%), bleeding from the gastrointestinal tract (5, 21.7%) and kidneys (3, 13.0%).

Conclusion. Thus, the manifestation of hemorrhagic syndrome in patients with ITP was recorded in practically all patients, characterized by the presence of both skin and mucosal manifestations in the form of bruises and petechiae, as well as bleeding ranging from nasal to internal and renal variants. Corresponding to the severity of thrombocytopenia, hemorrhagic syndrome differed in its intensity and duration in moderate and severe forms.

## LITERATURE

1. D.S. Matkarimova, D.E. Juraeva, M.I. Nabiyeva. General overview and state of the problem of immune thrombocytopenia prevalence. // Journal of Humanities and Natural Sciences. No5 (11), 2023.
2. Bussel J. et al. Immune thrombocytopenia //Expert review of hematology. - 2021. - Vol. 14. - No. 11. - P. 1013-1025.
3. Dai F. et al. Clinical features of secondary immune thrombocytopenia associated with primary Sjögren's syndrome //Frontiers in Medicine. - 2020. - Vol. 7. - P. 138.
4. Djuraeva D.E., Matkarimova D.S., Boboev K.T. Genes of the Integrin Family of Platelet Receptors (ITGA2 (C807T) and ITGβ3 (T1565C)): Features of Distribution and Analysis of the Role in Immune Thrombocytopenia//American Journal of Medicine and Medical Sciences 2025, 15 (2): 346-350.
5. Ito S. et al. Evaluation of thrombotic events in patients with immune thrombocytopenia //Annals of hematology. - 2020. - Vol. 99. - P. 49-55.
6. Kohli R., Chaturvedi S. Epidemiology and clinical manifestations of immune thrombocytopenia //Hämostaseologie. - 2019. - Vol. 39. - No. 03. - P. 238-249.
7. Machin N. et al. Prevalence and correlates of thrombosis in adults with immune thrombocytopenia: a NIS study //Thrombosis Research. - 2018. - Vol. 172. - P. 80-85.
8. Martínez-Carballeira D. et al. Pathophysiology, clinical manifestations and diagnosis of immune thrombocytopenia: contextualization from a historical perspective //Hematology Reports. - 2024. - Vol. 16. - No. 2. - P. 204-219.
9. Palau, J.; Sancho, E.; Herrera, M.; Sanchez, S.; Mingot, M.E.; Upegui, R.I.; Rodriguez Salazar, M.J.; de la Cruz, F.; Fernandez, M.C.; Gonzalez Lopez, T.J.; et al. Characteristics and management of primary and other immune thrombocytopenias: Spanish registry study. Hematology 2017, 22, 484-492.
10. Provan D, Arnold DM, Bussel JB, Chong BH, Cooper N, Gernsheimer T, Ghanima W, Godeau B, González-López TJ, Grainger J, Hou M, Kruse C, McDonald V, Michel M, Newland AC, Pavord S, Rodeghiero F, Scully M, Tomiyama Y, Wong RS, Zaja F, Kuter DJ. Updated international consensus report on the investigation and management of primary immune thrombocytopenia. Blood Adv. 2019 Nov 26;3 (22):3780-3817.
11. Shaw J. et al. The incidence and clinical burden of immune thrombocytopenia in pediatric patients in the United States //Platelets. - 2020. - Vol. 31. - No. 3. - P. 307-314.
12. Wu S. R. et al. Incidence, clinical characteristics, and associated diseases in patients with immune thrombocytopenia: a nationwide population-based study in Taiwan //Thrombosis Research. - 2018. - Vol. 164. - P. 90-95.