## Choosing the optimal treatment method for primary immune thrombocytopenia.

## Streszczenie w języku angielskim

**Introduction:** Primary immune thrombocytopenia (ITP) is a disease characterized by an isolated reduction in the platelet count of less than 100 x 1091 in the absence of other contributing factors. The pathomechanism of ITP is very diverse. It consists of a poor immune system response to the antigen, the development of autoantibodies to platelet glycoproteins IIb / IIIa and Ib / IX, excessive platelet destruction (liver, spleen) and a shortened platelet survival time. The primary therapeutic strategy for the ITP treatment is the use of glucocorticoids (GKS), intravenous immunoglobulins (IVIG), or both.

**Aim:** The aim of the study was to evaluate the effectiveness of ITP treatment in children with immunoglobulin or glucocorticoid preparations. Additionally, I compared the effectiveness of IVIG and glucocorticoids in the treatment of ITP depending on the children's age and gender. I also wanted to compare the effectiveness of different IVIG treatment protocols.

**Material and methods:** The study group consisted of 49 children hospitalized due to the newly diagnosed ITP in the Department of Haematology and the Day Ward of the Clinic of Paediatrics, Haematology and Oncology, Medical University of Warsaw. In this group, a retrospective analysis of 77 ITP therapies was performed based on the available medical documentation. According to current guidelines, a disease lasting up to 3 months was assumed as newly diagnosed ITP.

**Results:** Based on the analysis of the study group, a very good therapeutic response was found, regardless of the applied therapy (IVIG or GCS or both). In the analysed study group, a shorter response time to the applied treatment and a higher number of platelets obtained after the use of glucocorticoids were found. The best therapeutic effects of ITP, regardless of the treatment used (IVIG or GCS), were obtained in the group of children aged 7-12 years. Regardless of the ITP treatment used (GCS or IVIG), girls responded to the treatment better than boys. Statistical

analysis showed no differences in the efficacy of IVIG depending on the selected treatment regimen.

## **Conclusions:**

1. Glucocorticoids should be the drugs of first choice for the first-line treatment of ITP in children.

2. Factors influencing a better prognosis of children with first-line ITP are their age and female gender.

3. Selection one of the recommended immunoglobulin regimen in the treatment of primary ITP has no effect on prognosis.