Abstract
The aim of this study was to determine the clinical utility of platelet indices in the etiological characterization of thrombocytopenia. It was a descriptive, retrospective and cross-sectional study. In control patients, reference values (platelet count and platelet indices) were established and they were used to assess platelet indices in patients where thrombocytopenia coexisted with some oncohematologic disorders (non-Hodgkin Lymphoma, Hodgkin Lymphoma, acute leukemia, chronic leukemia, myelodysplastic syndrome, immune thrombocytic purpura). Laboratory evaluation was performed at still treatment-free diagnosis. In the cases of Immune Purpura, (decreased platelet volume- plateletcrit, and increased platelet distribution width) Chronic Myeloid Leukemia (increased platelet distribution width) and non-Hodgkin lymphoma or myelodysplastic syndrome (decreased plateletcrit), platelet indices could be used as a “guiding diagnostic tool”. However, they could not contribute to the differentiation between acute leukemias since they do not present any significant differences. In view of a presumptive diagnosis of mielodysplastic syndrome or acute myeloid leukemia, mean platelet value (MPV) could contribute to the diagnosis, since it would be lower in acute leukemia. The analysis of the results suggests that in clinical practice, platelet indices may contribute significantly to the confirmation of the diagnosis.

Keywords
Thrombocytopenia, Hematologic disease, Platelet indices.