

Gradually the general condition is improving, the cardio-respiratory normal and the cytostatic treatment is repeated.

**Conclusions** During hospitalization, she received intensive supportive treatment, the patient presenting a septic state, heart failure, staphylococcal pneumonia with acute respiratory failure, hydro-electrolytic, biochemical imbalances, anemia, neutropenia, thrombocytopenia, which required treatment with multiple antibiotics for 2 months.

#### PP-059 HEMOLYTIC ANEMIA IN CHILDREN

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**Aim** Hemolytic anemia is a condition that involves the destruction of erythrocytes (hemolysis) faster than the bone marrow could produce them.

**Material and Method** The study was carried out between 01.01.2018–01.01.2023 in children 0–18 years hospitalized with hemolytic anemia.

**Results** 40 children with hemolytic anemia were hospitalized: 11 (27.5%) with thalassemia major, 3 (7.5%) with thalassemia intermedia, 8 (20%) with thalassemia minor, 6 (15%) with microspherocytosis, 5 (12.5%) with G6PD deficiency, 6 (15%) with autoimmune hemolytic anemia and 1 (2.5%) with paroxysmal nocturnal hemoglobinuria. Distribution on sex: female 23 (57.5%) and male 17 (42.5%), by environment: 22 (55%) from rural and 18 (45%) from urban. Clinical manifestations: paleness with icterus, splenomegaly, dark urine, abdominal pain, asthenia. Average value of hemoglobin at admission at children with thalassemia major:  $3.81 \pm 1.04$  (3.3–4.2) g%, thalassemia intermedia:  $6.15 \pm 1.64$  (4.4–9.2) g%, thalassemia minor:  $7.21 \pm 0.81$  (4.4–8.2) g%, microspherocytosis:  $6.77 \pm 2.15$  (3.9–9.5) g%, G6PD deficiency:  $6.78 \pm 2.85$  (3.1–10.4) g%, autoimmune hemolytic anemia:  $5.53 \pm 1.52$  (3.11–7.8) g%, paroxysmal nocturnal hemoglobinuria  $5.25 \pm 1.64$  (3.6–6.9) g%. All children had increased values of bilirubin, sideremia, and ferritin.

**Conclusions** The most common hemolytic anemia was thalassemia major (27.5%). Most of them came from rural areas, and the female gender was more frequent. The lowest mean value of hemoglobin was in those with thalassemia major.

#### PP-060 STUDY OF PLATELET FUNCTION IN CHILDREN WITH HEMORRHAGIC SYNDROME

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**Aim** To study the state of platelet hemostasis in children with hemorrhagic syndrome in different nosology's, based on previously established reference interval (RI) values.

**Material and Method** We observed 389 patients aged from 4 months to 17 years and 11 months. The median age of treatment was 9.2 years (from 4 months to 17 years and 11

months). At the first stage were examined 230 healthy children for established RI platelets aggregation. On the second stage were examined 159 patients with hemorrhagic syndrome (HS), which presented of cutaneous and mucous hemorrhage (in present time and in anamnesis). We used different inductors of aggregation in whole blood using 'Multiplate' aggregometer (Verum Diagnostic Roche, France). The methodology of our study was specifically designed to determine the RI of platelets. Also we studied some parameters of the plasma hemostasis (Compact Max, Roche, France).

**Results** Reference intervals for inducers (ADP, TRAP, ASP-tests) in blood with different stabilizers (hirudin, citrate, lithium-heparin) were established. Significant differences of platelet aggregation were founded only in children under 1 year with TRAP inductor in blood stabilized with hirudin. Thrombocytopenia was founded in children with HS at different diseases. Hypoaggregation was detected more frequently with ADP activator - 41,5% cases among all children (majority of patients with tissue dysplasia and nervous system pathology). Hyperaggregation was detected more frequently with arachidonic acid - 22% among all children (majority of patients with cardiovascular pathology). Abnormalities of plasma haemostasis were founded in 3% of patients with HS. Disturbed in plasma hemostasis was not founded in patients with modified aggregation.

**Conclusions** The study of our results demonstrates that symptoms of HS may be indicative about the manifestations of thrombocytopenias in most cases, which are important to diagnose in time.

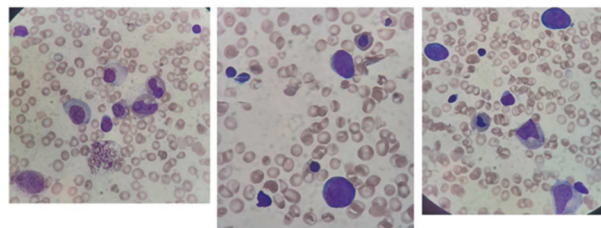
#### PP-061 SEVERE VITAMIN B12 DEFICIENCY PRESENTING WITH HEMOLYTIC ANEMIA

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**Aim** Severe macrocytic anemia due to vitamin B12 (VB12) deficiency in the early stages of infancy is a rare entity. Jaundice caused by hemolysis, and bone marrow (BM) histopathological resemblance to hematologic malignancies due to megaloblastic changes can be challenging through the diagnostic journey. A 6-month-old infant with severe VB12 deficiency is presented.

**Results** The 6-month-old male patient was brought to the pediatric emergency department due to escalating fatigue, lethargy, jaundice, and non-bilious vomiting over several weeks. Initial tests revealed severe macrocytic anemia (Mean Corpuscular Volume 108.4 fL) with a Hemoglobin level of 6.0 gr/dl, indirect hyperbilirubinemia, and neutropenia. Further



**Abstract PP-061 Figure 1** The bone marrow aspiration photographs showing megaloblastic changes. Cells with immature nuclei which are hard to discriminate in between hematogones and blasts were seen