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**Results:** All cases started with refractory anemia and pathological alteration in white blood cells. For early finding of leukocyte changes it was necessary to count not less than two hundred white blood cells in differential leukocyte count.

**Conclusions:** In all cases the early diagnosis is very important to administer the right therapy. In patients with refractory anemia in aged more than 50 years one should consider myelodysplastic syndrome and the pathological alteration is one of the first symptoms which we can find in these disorders.

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### LACTATE DEHYDROGENASE IN THE SERUM OF PATIENTS WITH MEGALOBlastic ANEMIAS

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Vitamin B12 and folic acid take part in the erythrocytopoiesis. As a lack of these vitamins in the patients' bodies, megaloblastic anemias appear.

**PURPOSE:** Elevation of lactate dehydrogenase (LDH) in the serum of patients suffering from anemia together with the other hematologic and biochemical tests as an important differential diagnostic parameter of megaloblastic anemia.

**METHODS:** In Daily transfusion hospital, during the last five years, 62 patients have been diagnosed and treated with megaloblastic anemia. The basic hematologic and biochemical analysis number of Er, Le, Tr, Hb, Hct, MCV, MCH, MCHC, indirect bilirubin, serum Fe have been analyzed in the Central biochemical laboratory. Serum LDH was according to the method DGKC with reagents by the company DiaSys, on the automatic analyzer COBAS MIRA plus.

**RESULTS:** The hematologic analyses showed reduced number of Er, Hb, Hct with increased values of MCV, MCH, MCHC. Biochemical analyses have shown increase value of the indirect bilirubin, serum Fe and LDH, whose activities ranged from 673-774 UI/L (N=160-480 UI/L). After receiving of the therapy the values of LDH were quickly normalized.

**CONCLUSION:** Although LDH is an enzyme which increases in the serum of patients suffering from many other diseases, its dramatic elevation and dynamics in patients with anemic syndrome are an important indicator in the diagnosis of megaloblastic anemia. Also, the reduction of the values of LDH to their normalization helps to monitor the efficiency of the given therapy.