

## THE DISTRIBUTION OF THE FERRIPRIVE ANEMIA DEPENDING ON THE MONTHS OF THE YEAR

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### **Abstract**

*Hematopoiesis represents the process of formation of the figurative elements of the blood. Hematopoiesis includes: erythropoiesis (the formation of erythrocytes), granulopoiesis (the formation of leucocytes), thrombocytopoiesis (the formation of thrombocytes). The process of hematopoiesis is influenced by numerous humoral factors.*

**Key words:** hematogen bone marrow, erythropoiesis, granulopoiesis, hematopoiesis

### **INTRODUCTION**

Erythropoiesis is accomplished in the hematogen red bone marrow from the wide bones.

The reticulocyte arriving in the peripheral blood continues the synthesis of Hb and enzymes until the loss of the mitochondrial apparatus and ribosomes, phenomenon that takes place in the spleen, the spleen attracts the rest of the mitochondria and ribosomes from the reticulocyte resulting into the adult reticulocyte. In the circulation there are reticulocytes normally, in proportion of 5-15%. The increase over the upper limit of the normal value takes place by the intensification of the medullary erythropoiesis with vitamin B or for pregnant women with the maternal fetal incompatibility in the Rh system. The decrease of the number of reticulocytes appears in the decreasing of the medullary production of erythrocytes; they don't proliferate, don't evolve, don't synthesize proteins.

The first cell that can be identified as belonging to the series of erythrocytes is the proerythroblast. In the conditions of an adequate stimulation is formed a great number of proerythroblasts, that give birth to erythroblasts and they give birth to reticulocytes.

The reticulocyte contains a great quantity of hemoglobin (up to a concentration of 34%), the nucleus is decreasing, and its last remains are eliminated from the cell. The reticulocyte contains a small quantity of basophilic material (rests of the Golgi apparatus, mitochondrias),

The reticulocyte passes from the bone marrow in the sanguine capillaries by the process of diapedesis (it passes through the pores of the capillary membrane).

The basophilic materials remaining in the reticulocytes disappears normally in 1-2 days, when the cell becomes a mature erythrocyte. Due to the short period of life of the reticulocytes, their proportion in the erythrocytes from the blood is approximately of 1%.

#### MATERIAL AND METHOD

We accomplished a retrospective study, prospective, on a number of 149 patients with the diagnosis of ferriprive anemia, admitted in the department of hematology of the Oradea County Hospital.

The period on which was extended the study is of 5 years, included in the interval 01.01.2008-31.12.2012.

For the performing of the study was used the archive of the Oradea County Hospital, respectively the computer data base of the unit.

The processing of the data was performed with the help of the program Microsoft Office Excel 2003.

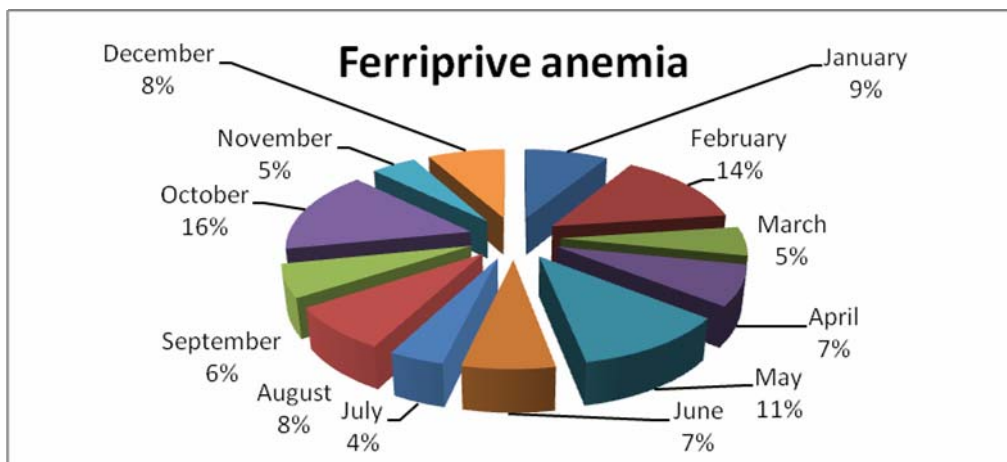
The representation of the results was made with the help of graphics and tables.

#### RESULTS AND DISSCUSIONS

*Table 1.*

**The distribution of the cases of ferriprive anemia / months.**

Month	Ferriprive anemia	
	No.	%
January	13	9
February	21	14
March	8	5
April	11	7
May	17	11
June	10	6
July	6	4
August	12	8
September	9	6
October	23	15
November	7	4
December	12	8
<b>Total</b>	<b>149</b>	<b>100</b>



**Figure 1. The distribution of the cases of ferripriva anemias / months.**

Between the years 2008-2012 were hospitalized 117680 ill persons with ferripriva anemia at the Oradea County Hospital, in the department of hematology.

In the period of the study, were met two peaks of the number of cases of ferripriva anemia, in the month of February (14%) and October (15%).

#### **CONCLUSIONS**

Depending on the distribution on months of the cases of ferripriva anemia, we remarked that the autumn is the period with most of the cases, a possible explanations being the scarce alimentary hygiene or other associated pathologies.

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