THE DISTRIBUTION OF THE FERRIPRIVE ANEMIA DEPENDING ON THE OCCUPATION

Baldea Corina*

*University of Oradea, Faculty of Environmental Protection, 26 Gen. Magheru St., 410048 Oradea, Romania, e-mail: corina68a@yahoo.com

Abstract

The ferriprive anemia has to be differentiated from the others hypo chrome anemia. Among these on the second place as frequency, after the ferriprive anemia, are installed beta-thalassemias. For the differentiating of the two affections the most important are the tests of the iron metabolism.

The total quantity of iron from the body is regulated mainly by the modification of the rate of absorption.

Key words: iron, erythropoiesis, beta-thalassemias, hypo chrome anemia.

INTRODUCTION

In the first weeks of embryonic life, the erythropoiesis takes place in the vitelline sack.

In the second semester of the pregnancy, the liver is the main organ responsible for the forming of the erythrocytes, a significant number is formed in the spleen and in the lymphatic ganglions.

Afterwards, in the last month of pregnancy and after the birth, the erythrocytes are produced exclusively in the bone marrow.

Up to the age of 5, the erythrocytes are fomed in the marrow of all bones.

After the age of 20, the marrow of the long bones is loaded with lipids and doesn't produce erythrocytes, except for the proximal regions of the humerus and tibia. Beginning with this age main of the erythrocytes continue to be formed only in the marrow of the bones with membranous calcification, as are the vertebrae, stern, ribs and iliac bones. Even in these bones, the medullary production of erythrocytes decreases together with the ageing.

The form of an erythrocyte can be changes very much, when the cell is introduced in the capillaries, becoming deformed. Practically the erythrocyte is similar to a sack that can be deformed in almost any form. Because in report to the cytoplasm the normal cell presents an excess of cellular membrane, the deforming doesn't determine an important spreading of the cellular membrane (will not lead to the destruction of the cell, as it would have happened in the case of many other cells).

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

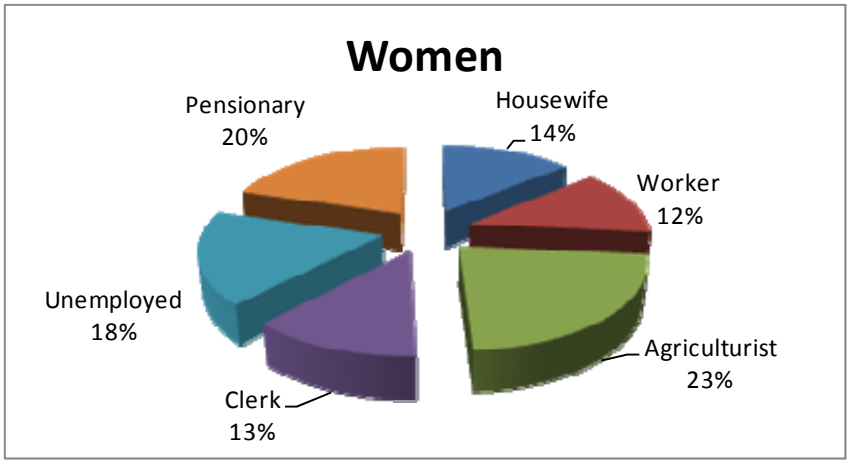

Figure 1. The distribution of the cases for women depending on the occupation

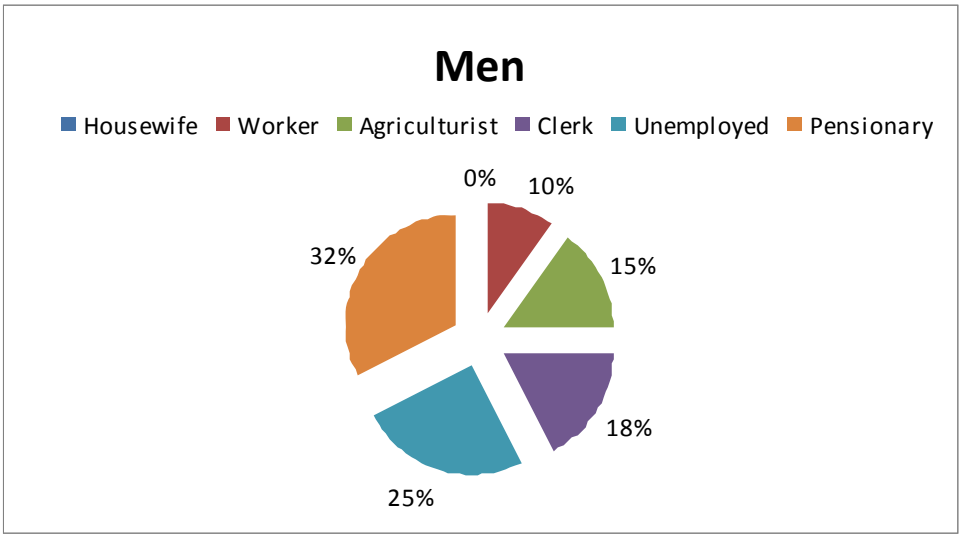

Figure 2. The distribution of the cases for men depending on the occupation

From the total of cases of ferriprive anemia 33% were pensioners, followed with 25% by unemployed (17%), clerks and agriculturists (15%).

CONCLUSIONS

The correlation between the incidence of becoming ill and occupation is that the ferriprive anemia appears more for the pensioners and unemployed.

BIBLIOGRAPHY

1. DeMott W, Tilzer L. Hematology,1994. In *Laboratory Test Handbook*, 3rd Edition, Hudson (Cleveland), pp. 517-618
2. Fischbach F, Dunning M. Blood Studies, 2004: Hematology and Coagulation. In *A Manual of Laboratory and Diagnostic Tests*,Philadelphia, pp. 38-161
3. Frances Fischbac, 2009. Blood Studies: Hematology and Coagulation. In A Manual of Laboratory and Diagnostic Tests. Lippincott, Williams & Wilkins, USA, 8 Ed., pp. 121-123.
4. http://pid.nci.nih.gov/browse_pathways.shtml#NCI-Nature
5. http://highered.mcgraw-hill.com/sites/dl/free/0072437316/120060/ravenanimation.html
6. http://www.sigmaaldrich.com/life-science/cell-biology/learning-center/pathway-slides-and.html
7. http://www.hhmi.org/biointeractive/neuroscience/lectures.html
8. Jacques Wallach, 2001. Hematologic affections. In Interpretation of the diagnosis tests. Medical Sciences publishing house, Romania, 7 Ed., pp. 475.
9. Laborator Synevo, 2010. Specific references to the work technology . Ref Type: Catalogue.
10. Lothar Thomas 1998. Transferrin Saturation. In Clinical Laboratory Diagnostics-Use and Assessment of Clinical Laboratory Results. TH-Books Verlagsgesellschaft mbH, Frankfurt /Main, Germany, 1 Ed., pp. 275-277.
11. Perkins S, 2004. Examination of the Blood and Bone Marrow. In *Wintrobe's Clinical Hematology*,Philadelphia, pp. 3-21.
12. Shafer J, **1996**. Canadian Society of Laboratory Technologist Congress,Winnipeg,Manitoba, June 16 to 20, Workshop Manual, pp. 1, 37-40, 43-44, 53, 55-60, 67-71, 79-82.
13. Skubitz K, 2004. Qualitative Disorders of Leukocytes. In *Wintrobe's Clinical Hematology*, Philadelphia, pp. 1801-1813.
14. Thomas L, 1998. Hematopoiesis. In *Clinical Laboratory Diagnostics*, First Edition, Frankfurt/Main, pp. 463-469.
15. Thomas L, 1998. Blood Cell Differential Count. In *Clinical Laboratory Diagnostics*, First Edition, Frankfurt/Main, pp. 509-517.
16. Wallach J, 2004. Hematologic affections. In Interpretation of the diagnosis tests. Ed VII, Translated by Ionescu R, Dragomir M, Medical Sciences publishing house, Buc., pp. 458, 462-464.