

3. Chernyshyova, N.M. The electronic database of the Cabbage family (Brassicaceae) presented to herbariums of VSU of P.M. Masherov / N.M. Chernyshyova/YOUTH. INTELLIGENCE. INITIATIVE. Materials III of the International scientific and practical conference of students and undergraduates, Vitebsk, on April 23-24, 2015 / VSU of P.M. Masherov of University; redkol.: I.M. Prishchepa [etc.]. – Vitebsk, 2015. – Page 86–87.

4. Chernysheva, N.M. A critical analysis of the Cabbage family (Brassicaceae) in the Belarusian Poozerye / N. M. Chernysheva / Youth. Intelligence. Initiative : materials of IV International scientific-practical conference of students and undergraduates, Vitebsk, 29 April 2016 / Vit. state Univ ; redkol.: I. M. Prishchepa (ed.) [et al.]. – Vitebsk: VSU named after P. M. Masherov, 2016. – P. 79 – 80.

## **ANALYSIS OF THE PATHOLOGY OF CARBOHYDRATE METABOLISM**

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The relevance of the study is determined by the necessity of systematization and understanding of the material on disorders of carbohydrate metabolism, their causes and diagnostics. This problem is of scientific importance since the identification of patients with early disorders of carbohydrate metabolism and prevention is of great medical and social importance. As with proper screening in patient groups that have high probability of violations of carbohydrate metabolism, effective for primary prevention of diabetes type 2 in the stage of pre-diabetes can significantly reduce macro - and microvascular complications [1, 2].

The purpose of the study: to establish the prevailing disease of carbohydrate metabolism and to analyze their detection among female and male population.

**Material and methods.** To work used data of the anamnesis of patients and results of clinical and biochemical tests of their blood and urine to me “Vitebsk city polyclinic № 6”. The analysis was performed using descriptive and analytical statistical methods.

Health care institution Vitebsk City Polyclinic number 6 serves a population of 42,560 people (2015). Every year in the laboratory of the polyclinic conducted more than 100,000 analyses. The bulk of the research falls on the General blood and urine, determination of blood glucose with a load and without. A shift is about 80 analyses to determine blood sugar. The number of outpatient visits to the doctor endocrinologist for 2015 amounted to 9023.

**Results and their discussion.** For 3 years held clinical and biochemical examinations of the patients served by the hospitals from 2013 to 2015. The studies revealed violations of carbohydrate metabolism in 13% of patients in

2015. In 2014, the figure was 12% and in 2013 by 11%. Studies have shown that the pathology of carbohydrate metabolism increased by 1% per year.

Among the disorders of carbohydrate metabolism more frequently diabetes mellitus type 2, and nodular goiter (figure 1).

This is due to the age of the patients. Disorders of carbohydrate metabolism, developed after more than 40 years. In this case, heredity is of great importance. In addition, the risk of disease increases for obesity, atherosclerosis and high blood pressure, the presence of harmful habits.

The growth of such diseases as acquired hypothyroidism. According to statistics, hypothyroidism in women the most common – 9 women out of 1000, while among men this figure is only 1 out of 1000.

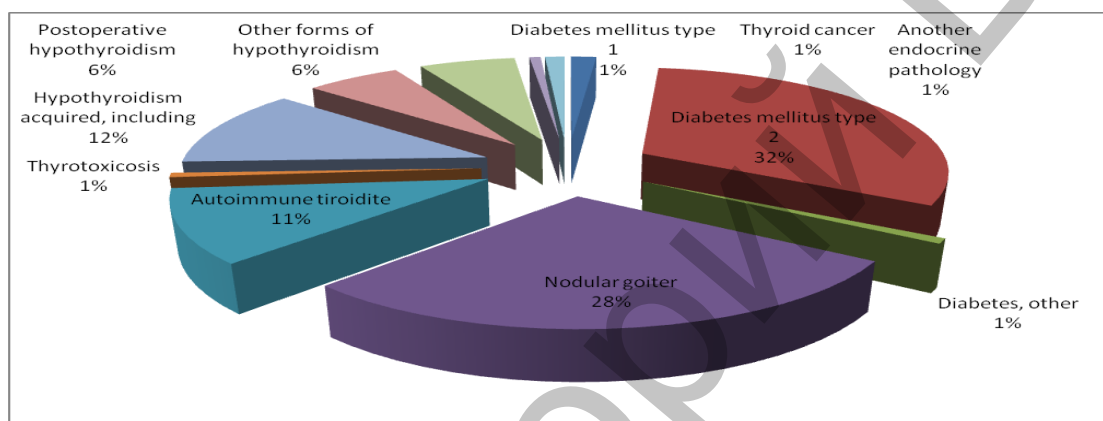


Figure 1 – Basic carbohydrate metabolism abnormalities in patients of me “Vitebsk City polyclinic № 6” for 2015.

In 2015, for detection of disorders of carbohydrate metabolism directed and examined 10828. The number of women put on the account at the endocrinologist, amounted to 5220, the number of men – 1050 (figure 2). In 2014, those percentages 4693 women, men 894. In 2013, of the women studied 4293 was put on the account at the endocrinologist, and men 793 человека. From the data obtained it is seen that the number of women seeking help and who were registered increases for the year by approximately 450 people, and men about 100 people.

Such prevalence of diseases are associated with the number of women served by the institution, and consisting on the account at the endocrinologist. In the study, it was noted that women are better about their health. Annually undergo examinations and visits to doctors.

To date, it is not only secondary prevention of complications of diabetes, but the detection of early disorders of carbohydrate metabolism, estimation of the risk of developing and carrying out measures aimed at primary prevention of diabetes.

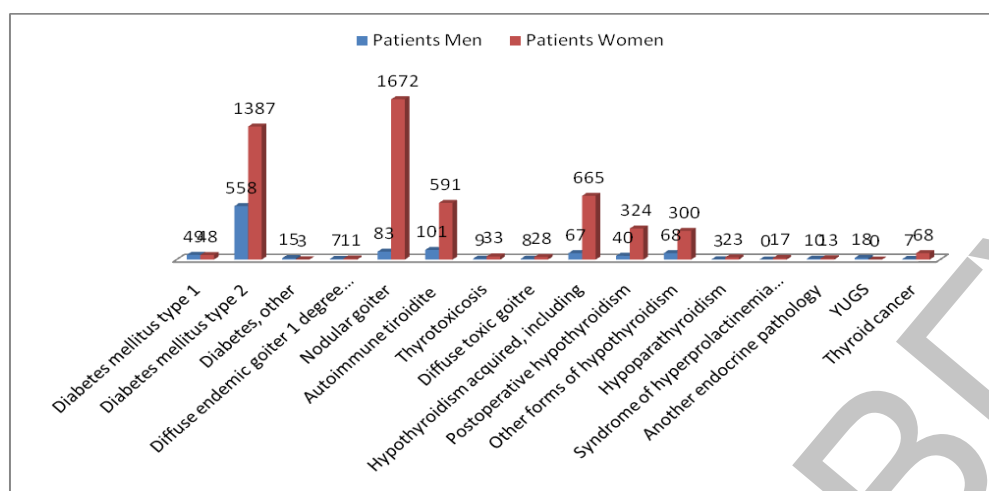


Figure 2 – The prevalence of the disease among women and men in 2015.

To detect early disorders of carbohydrate metabolism in primary care can apply scale prediction of diabetes and test glucose tolerance. Early disorders of carbohydrate metabolism should be examined in individuals belonging to high risk group.

**Conclusion.** The results can be seen that the number of pathology violations of carbon-water exchange is rapidly increasing. The share of diagnostics of violations of carbohydrate metabolism accounts for 27% of all of the research conducted in clinical and biochemical laboratories. A greater number of pathologies have on the female population -83% of the identified diseases in males – 17%.

Thus, the detection of violations of carbohydrate metabolism is an important area of primary prevention of diabetes. Further research will be continued and aimed at the study of diabetes complicated by diabetic nephropathy in the adult population.

Reference list:

1. Cohn, R. M., Roth, K. S. Early diagnosis of diseases of metabolism substances. / R. M. Cohn , K. S. Roth / M.: Medicine, 1986. – 640 p.
2. Endocrinology and metabolism (in 2 volumes under the editorship of F. FeliCa). – M.: Medicine, 1985.

**INVENTORY AND ANALYSIS OF THE COLONIES  
OF HERACLEUM SOSNOWSKYI'S CONDITION  
ON THE TERRITORY OF LYOZNENSKY DISTRICT WITH GIS**

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As a result of anthropogenic activities on our planet, many species of animals and plants migrate. At the same time, part of the migrations leads to serious environmental, social and economic consequences. There is a