

STUDY AND COMPARATIVE CHARACTERISTICS OF THE LEVEL OF SOME SEXUAL HORMONE IN THE BLOOD SERUM OF MEN WITH TYPE 2 DIABETERS

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Introduction Sexual hormones don't only play a pivotal role in the several of sex and reproductive maturity, may also help in the regulation of lipid, protiens, carbohydrate metabolism and some inflammatory factors, all these may be known to influence insulin sensitivity. In recent years, sexual hormones deficiency has been not only associated with general health of men but also with certain common systemic disorders like abdominal obesity, type 2 diabetes mellitus & others. **Aim:** To compare the serum total some sexual hormon levels in type 2 diabetes mellitus patients with that of non-diabetic healthy controls. Sexual hormones (as estradiol, progesterone, androstenedione, or testosterone) that are produced especially by the ovaries, testes, or adrenal cortex and that exerts estrogenic, progestational, or androgenic activity on the growth or function of the reproductive organs or on the development of secondary sex characteristics [1].

Methods: In the present study, total 50 patients, 25 men aged 3-50 years which were diagnosed as type 2 diabetes mellitus patients and confirmed by the estimation of fasting plasma glucose (about 130 mg/dl) on two opportunity were selected from the many hospitals that have situations of diabetes mellitus patients.

The results: The serum total testosterone level of diabetic group was significantly lower than that non diabetic control group (p-value = 0.000). The mean of serum total testosterone of diabetic group was found 4.45 ± 2.09 ng/ml and serum total testosterone of non-diabetic control group was 7.21 ± 1.98 ng/ml. **Conclusion:** As low serum total testosterone levels are found in type 2 diabetes mellitus patients, this may highlight requirement of urgent implementation of screening programs, in order to detect testosterone deficiency in all type 2 diabetes mellitus male patients at an early stage and to supplement testosterone accordingly.

Conclusion. This study has shown that there is a significant reduction in serum total testosterone levels in type 2 diabetes mellitus patients.. As low serum total testosterone levels are found in type 2 diabetes mellitus patients, this may highlight requirement of urgent implementation of screening programs, in order to detect testosterone deficiency in all type 2 diabetes mellitus male patients at an early stage and to supplement testosterone accordingly.

References

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PROGNOSTIC FACTORS FOR CANCER OF THE ESOPHAGUS

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Relevance. Among other neoplasms, esophageal cancer (EC) takes the 9th place. 1-year mortality among newly diagnosed patients currently reaches 65%, being one of the highest among all the malignant tumors in adults [1, 2].

Goal. To study prognostic factors in radically operated patients with EC.

Material and methods. In 2016-2018 227 patients were registered with the Grodno Regional Oncology Center (GROC) for EC. Among them, a group (23 patients) was allocated who underwent radical surgical and chemoradiotherapy in the adjuvant mode in the Grodno Regional Clinical Hospital (GRCH). The medical records of inpatients were analyzed and the protocols of morphological studies of specimen were studied. In 1 case, the primary tumor was located in the upper part of the thoracic esophagus, in 10 – in the middle part, in 10 – in the lower part of the thoracic part, 2 of them showed spread to the stomach. Most of the patients (14 people) were over 60 years, only 3 of them were women. In 1 patient, IB stage of the tumor was diagnosed, in 2 – IIA, in 3 – IIB, in 9 – IIIA, in 2 – IIIB, in 5 – IIIC and in 1 – IV. The stage of the disease and the histological type of the tumor was finally established after the morphological study of the specimen postoperatively.

Result. When evaluating prognostic factors in the observed patients, it was found:

1) depth of tumor invasion (T): in 6 cases, the primary tumor infiltrated the muscular membrane of the esophagus wall (T2), in 9 cases, the tumor sprouted the esophagus wall and adventitia (T3), and in 8 cases the tumor sprouted the esophagus wall and spread to the adjacent mediastinal structures (T4a);

2) the presence of regional metastases (N) was found in 12 of 23 patients. Moreover, N1 (damage from 1 to 2 regional lymph nodes) was noted in 10, N2 – (damage from 3 to 6 regional lymph nodes) in – 2;

3) the histological type and degree of tumor differentiation: squamous cell carcinoma (SCC) G1 – in 8 patients, SCC G2 – in 10; SCC G3 – in 3 and tubular adenocarcinoma G2 – in 2 patients;

4) the absence of tumor cells at the edges of the surgical incisions (R0) was observed in the majority of operated patients (22 out of 23 patients);