

ASSESSMENT OF CHANGES IN TOTAL TESTOSTERONE LEVELS IN THE TREATMENT OF TYPE 2 DIABETES MELLITUS

Tilavov Tolibjon Bakhtiyorovich

A master degree of the department of faculty and hospital surgery and urology of the Bukhara State Medical Institute, Bukhara, Republic of Uzbekistan

Introduction. Testosterone is a sex hormone that regulates a number of processes in the human body, including fertility, sex drive, bone mass, fat distribution, muscle mass, and red blood cell production. Testosterone levels typically decrease as you age, but for some people, these levels can become too low and cause unwanted symptoms. Diabetes is a condition in which the body is unable to process blood glucose, also known as blood sugar. While a link between low testosterone and diabetes isn't immediately obvious, researchers have discovered that the two are connected.

Thus, testosterone exhibits many physiological effects, the most important of which are: sexual disposition and strength, aggression and sexual behavior. It should be noted that this endogenous sex hormone, along with androgenic effects (stimulation of the male reproductive apparatus), is able to have a strong anabolic effect on various tissues (muscles, kidneys, liver, uterus), that is, to increase protein synthesis in them.

Materials and methods. 66 men aged 45-60 (average age 50.4±1.3) were under our control. All patients had elevated blood sugar levels.

Tests performed: physical examination, complete blood count and urine test, glucose tolerance test, total testosterone level, thyroid stimulating hormone (TSH), laser Doppler penile flowmeter, IIEF (International Index of Erectile Function) and ICF (International activity classification) questionnaires.

All patients were prescribed Tigralis-5 1 tab x 1 time to correct ED every day for 28 days. It should be noted that the patients were included in the survey before complaining about the presence of violations in the genital area, they considered the existing violations as "normal" for their work and work routine, and did not consult a urologist themselves. accompanied by an increase in blood sugar.

Studies conducted at symmetric points were evaluated after calculating the average statistic and reflected the basal blood flow rate at 2 points for 2 minutes. The curves were processed immediately after each study using the software. The criteria of adequate blood flow to the penis were determined based on the results of a survey of a control group of 15 healthy volunteers aged 25-35 without complaints of erectile dysfunction.

Results. All patients had a total testosterone level in the normal range, an androgen index > 70%. Patients with arterial hypertension were excluded from the study and referred to a cardiologist for correction of their condition. It was 23.3±2.4 points in the examined patients. At the same time, the erectile

component was 3.2 ± 1.8 points, the copulatory function was 4.5 ± 1.5 points in general, and the psychogenic component was 4.3 ± 2.6 points. According to the IIEF scale, the maximum score is 75; 46.6 ± 4.8 points in examined patients. These data are consistent with mild to moderate erectile

dysfunction. Evaluation of microcirculation study results in baseline and follow-up patients. Therefore, the presence of ED in all patients was proved, which was confirmed in addition to the subjective assessment according to the IIEF and ICF questionnaires scored, by objective data: revealed microcirculation disorders of the cavernous bodies of the penis, the presence of endothelial dysfunction. In the control after 1 month, according to the questionnaires, the total score of the ICF increased and reached normal values – up to 38.4 ± 1.8 , the indicators for erectile, copulative and psychogenic components increased by more than 2 times, the total score for IIEF approached the

maximum of 59.8 ± 2.4 . The total amount of testosterone was shown to be 4.7 ± 1.3 before treatment. We can see that the indicator of the total amount of testosterone in the blood after treatment has increased significantly by 6.1 ± 1.7 .