



результатів вміст Cd у зразку Cd(Zn)Te менше вмісту Te. Значна кількість Оксигену з'являється внаслідок окиснення поверхні Гідроген пероксидом. Після пасивації зразки ретельно промивали, наносили на їхню поверхню золоті контакти та вимірювали вольт-амперні характеристики.

Проведене порівняння вольт-амперних характеристик зразків Cd(Zn)Te і Cd(Mn)Te після різних типів обробки поверхні чітко показує, що проведення процесу пасивації суттєво підвищує значення їх опору Cd(Zn)Te та Cd(Mn)Te та підтверджує доцільність застосування пасивації поверхні для покращення функціональних властивостей напівпровідникових матеріалів.

СЕКЦІЯ 22 АКТУАЛЬНІ ПИТАННЯ КЛІНІЧНОЇ ІМУНОЛОГІЇ, АЛЕРГОЛОГІЇ ТА ЕНДОКРИНОЛОГІЇ

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INFLUENCE OF SELENIUM-CONTAINING MEDICINES ON CARBOHYDRATE METABOLISM IN PATIENTS WITH METABOLIC SYNDROME

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According to WHO, the prevalence of metabolic syndrome (MS) is 20-40%. It most commonly affects middle aged and older people (30-40%). In general about 30% (16,8% women and 14,9% men) of the planet's population have excess body weight.

Pathophysiological processes that accompany obesity cause the development of hypertension, disorders of carbohydrate metabolism, dyslipidemia, which are components of the metabolic syndrome (MS). In patients with obesity of the Ist class, the risk of developing type 2 diabetes mellitus increases three times, II class – 5 times and III degree – 10 times.

It is known that selenium is an antioxidant, has hypolipidemic, insulin-mimetic and immune-modulating effects, but selenium use in the complex treatment of disorders of carbohydrate metabolism is still poorly studied.

All this indicates the relevance of the research in the chosen direction.

The aim of the study was to improve the treatment of carbohydrate metabolism disorders in patients with metabolic syndrome.

A comprehensive examination of 56 patients with MS was performed.

The examined patients were randomly divided into two groups: 26 people with MS received standard treatment: antihypertensive drugs (ACE inhibitors – enalapril 10-20 mg/day), antiplatelet agents (acetylsalicylic acid 75-100 mg/day), statins (atorvastatin – 10-20 mg/day), patients with type 2 diabetes received biguanides (metformin at average daily dose of 1000-2000 mg/day) and formed comparative group. The main group consisted of 30 people who received medicine containing 0,333 mg of sodium selenite, equivalent to 100 µg of selenium for 30 days, against a background of basic therapy. The results obtained were evaluated before the beginning of treatment and immediately after the treatment.

Significant reductions in fasting glycaemia, glycated haemoglobin, and HOMA-IR were observed in both groups ($p < 0,05$), more pronounced changes were obtained against a background of additional selenium administration. In the group of people who received selenium with basic therapy, HOMA-IR was significantly lower (by 20%) compared to the other group ($p < 0,05$).

As a result of taking selenium-containing medicines, statistically significant decrease of insulin resistance (decreased HOMA-IR) in patients of the main group compared with the other group against a background of basic treatment for 1 month was received, which indicates the insulin-mimetic properties of selenium.