

filter colorimeters; and Beckman double beam Model-25 and Shimadzu micro-flow CL-750 spectrophotometers. Hexokinase kit was obtained from Sigma Chemical Company USA and GOD-POD from Accurex, India. All other reagents were of analytical grade. All done in Al-Dewantah Central Hospital- Iraq.

Results. The concentration of glucose increase with the increasing the concentration of T3, T4. Increased glucose output from liver is the pivotal reason for the induction of hyperinsulinemia, induction of glucose intolerance, and development of peripheral insulin resistance. Glucose tolerance in thyrotoxicosis is caused by elevated hepatic glucose output along with upregulated glycogenolysis. This phenomenon is responsible for worsening of subclinical diabetes and exaggeration of hyperglycaemia in T2DM. Thyrotoxicosis may lead to ketoacidosis also due to elevated lipolytic actions and increased hepatic β oxidation.

Conclusion. In internal medicine, it is repeatedly proven that the association between thyroid dysfunction and diabetes mellitus is evident. Thyroid dysfunction chiefly comprises hypothyroidism and hyperthyroidism although the entity belongs to the same organ but with vast difference in pathophysiology as well as clinical picture.

References

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INDETERMINATE EFFECTS OF VITAMIN D

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Relevance. In recent years, interest in the effects of vitamin D has increased, as a number of studies have revealed a connection between its low values and an increased risk of certain pathologies, including certain types of cancer, infections, autoimmune diseases, cardiovascular diseases, mental disorders, and pregnancy complications [1].

Purpose of the study. Assessment of vitamin D deficiency in patients of the Republic of Iraq and identification of factors causing its decline.

Material and methods. The study was performed at the Grodno State University and the Central Health Laboratory (Sheikh Zayed Hospital, Iraq) in 2019. 150 patients (20-81 years) were examined (76 men – 50.6%, 74 women – 49.4%): 30 patients with liver diseases, 30 – chronic renal failure, 30 – with arthritis, 30 – tumor processes, 30 – with thyroid pathology. An immunological and biochemical study (the level of vitamin D, alpha-fetoprotein, parathyroid hormone, rheumatoid

factor, urea and creatinine levels, markers of hepatitis B/C were performed in blood serum. The classification of vitamin D levels: International Endocrinological Society, 2011(deficiency, deficiency, sufficient content). Statistical analysis – SPSS13.

Results. The examined groups significantly differed in age, sex, and body weight. Individuals in all groups consumed less vitamin D with food. Only 2.6% of the examined daily consumed with food the minimum sufficient amount of vitamin D – 10-15 mcg/day. The frequency of deficiency, insufficiency and optimal levels of vitamin D in the groups examined: liver disease: 70.0% – <20 ng / ml, 3.3% – 21-29 ng / ml, (p = 0.001), 26.7% – ≥20 ng / ml, (p = 0.003); kidney diseases: 93.4% – <20 ng / ml, 6.6% – 21-29 ng / ml (p = 0.001); arthritis: 70.0% – <20 ng / ml, 6.6% – 21-29 ng / ml, (p = 0.001), 23.4% – ≥20 ng / ml, (p = 0.002); thyroid disease: 60.0% – <20 ng / ml, 10.0% – 21-29 ng / ml, 20.0% – ≥20 ng / ml, (p = 0.003); tumor processes: 40.0% – <20 ng / ml, 13.3% – 21-29 ng / ml, 46.7% – ≥20 ng / ml, (p = 0.002). Among the examined individuals the effects of deficiency (up to 13.3% of the examined, p=0.002) and deficiency (up to 70.0% of the examined, p=0.003) of vitamin D were reliably established.

Conclusion. The high prevalence of D-hypovitaminosis among the general population, including people with arthritis, diseases of the liver, kidneys, thyroid gland and tumor processes, the versatility of the functions of vitamin D and its role in the body, pathogenetic relationships and the effect of vitamin D on the body systems, indicate the need to optimize vitamin D levels both at the population level in the population and in risk groups.

Bibliography

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BIOCHEMICAL MARKER OF KIDNEY DISEASE

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Introduction. Currently, the problem of medical science is the diagnosis and treatment (surgical, therapeutic) of kidney diseases. The outcome of many kidney diseases is renal failure. In this regard, it is for this category of patients that it is important to improve the research methods used in clinical laboratory diagnostics and, first of all, to identify markers of renal function [1].

Objective. Assess cystatin-C and NGAL as an indicators of renal function.

Material and methods. Studies were performed in 51 patients. The main group (with diagnosed renal pathology) consisted of 32 patients (age 37.2±6.1) of the