

divided into two groups: the main group (MG) consisting of 20 patients with RR-TB and alcohol dependence; and the comparison group (CG) comprising 21 patients with RR-TB without significant risk factors. The control group included 33 healthy individuals. Patients in both MG and CG did not differ significantly in age, gender, or characteristics of tuberculosis inflammation. All patients with RR-TB were examined according to clinical protocols. The level of IFN- γ in serum was determined using an enzyme-linked immunosorbent assay (ELISA). Statistical data processing was performed using STATISTICA software (Version 10.0).

Results and discussion. A comparative assessment of the baseline serum IFN- γ levels was revealed to be significantly lower in patients with RR-TB by 24.7% and 26.4%, respectively, in the MG and CG compared to those in the control group ($p_{1,2} = 0.02$) (Table 1).

Baseline levels of IFN- γ in the serum of patients with disseminated forms of MDR-TB

Name of the indicator	Control group, n=33	Patient groups		P
		MG, n=20	CG, n=21	
Serum IFN- γ level, pg/ml	194,1 (77,7-596,4)	146,1 (182,0-246,7)	142,9 (146,4-212,1)	$P_{1,2} = 0,02$ $P_3 = 0,4$

Note: Comparison of groups: p_1 , p_2 – control group and groups of patients with tuberculosis (main group and comparison group, respectively); p_3 – comparison of groups of patients with pulmonary tuberculosis; Mann-Whitney U-test.

The baseline level of IFN- γ in patients from MG and CG did not significantly differ, being 146.1 (182.0-246.7) and 142.9 (146.4-212.1) respectively ($p = 0.4$).

Conclusion. A low baseline level of endogenous IFN- γ was established in patients with RR-TB. The obtained results indicated that the presence of alcohol dependence in this category of patients did not significantly affect the level of IFN- γ .

COMPARISON OF SERUM LIPID LEVELS BETWEEN ISCHEMIC AND HAEMORRHAGIC STROKE PATIENTS: AN OBSERVATIONAL STUDY

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Introduction. Stroke, or cerebrovascular accident (CVA), leads to rapid brain function loss due to disrupted blood supply from ischemia or hemorrhage.

From 1990 to 2010 stroke rates declined by 10% in developed countries but increased by 10% in developing nations. Risk factors include non-modifiable (age, gender, ethnicity, family history) and modifiable factors (hypertension, diabetes, smoking, inactivity, heart conditions).

The relationship between serum lipid levels and stroke incidence is debated. While serum lipids, total cholesterol, triglycerides (TG), low-density lipoprotein (LDL), and high-density lipoprotein (HDL), are essential for bodily functions, studies show mixed results regarding their link to stroke risk.

Aim of the study. This research aimed to analyze the variations in serum lipid profiles among ischemic and hemorrhagic strokes, with the goal of clarifying their potential roles in stroke risk and informing the development of preventive management guidelines for local patients.

Materials and methods. This observational study at the Neurology Department of the Grodno University Clinic, took place from February to December 2024. It involved 20 patients with ischemic stroke and 20 with hemorrhagic stroke. After obtaining informed consent, demographic and clinical data, as well as stroke type, were collected using standardized questionnaires and medical records. Blood samples were analyzed for serum lipid levels, with accuracy ensured. Data were compared between the two stroke groups at a significance level of $p < 0.05$.

Results and discussion. The average age of ischemic stroke patients was 66.7 ± 7.85 years, with 75% (15) male and 25% (5) female. In the hemorrhagic stroke group, the average age was 66.6 ± 9.33 years, comprising 65% (13) male and 35% (7) female. All patients in both groups had a history of arterial hypertension. Among ischemic stroke patients, 80% (16) had coronary heart disease, 15% (3) were obese, and 15% (3) had diabetes. In the hemorrhagic group, 60% (12) had coronary heart disease, 20% (4) were obese, and 15% (3) had diabetes mellitus. The mean total cholesterol level in ischemic stroke patients was 5.48 ± 1.45 mmol/L, compared to 5.04 ± 0.81 mmol/L in those with hemorrhagic stroke. The mean HDL levels were slightly higher in ischemic stroke patients at 1.22 ± 0.37 mmol/L, whereas the hemorrhagic stroke group recorded a mean HDL of 1.18 ± 0.29 mmol/L. For LDL levels, ischemic stroke patients had a mean of 3.42 ± 1.04 mmol/L, while hemorrhagic stroke patients had a mean of 3.17 ± 0.70 mmol/L. Mean TG levels were 1.72 ± 0.65 mmol/L for ischemic stroke patients, in contrast to 1.43 ± 0.50 mmol/L for those with hemorrhagic stroke. Among the ischemic stroke patients, 55% (11) exhibited abnormal total cholesterol levels, while 75% (15) had elevated HDL levels. Furthermore, 65% (13) presented with abnormal LDL levels, and 45% (9) had elevated triglyceride levels. In contrast, the hemorrhagic stroke group showed a lower prevalence of abnormal total cholesterol levels at 45% (9), yet a striking 90% (18) had elevated HDL levels. The LDL levels were notably high in this group as well, with 85% (17) displaying abnormalities, whereas only 5% (1) of hemorrhagic stroke patients had elevated TG levels. In the comparison the p-values were as follows: total cholesterol levels had a p-value of 0.244, HDL levels had a p-value of 0.706, LDL levels had a p-value of 0.375, and TG levels

had a p-value of 0.121. Overall, all p-values exceeded the conventional threshold of 0.05, indicating no significant differences in lipid profiles between the two stroke types.

Conclusion. The analysis shows no statistically significant differences in serum lipid levels between ischemic and hemorrhagic stroke patients, with all p-values exceeding 0.05. Given these findings, further research is needed to explore lipid profiles in stroke patients. Improvements could include larger sample sizes and more diverse populations to better understand the relationship between lipid levels and stroke types.

ISAACS' SYNDROME – POSSIBLE ETIOPATHOGENESIS & CLINICAL ASPECTS

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Introduction. Isaacs' Syndrome (IS) is a rare condition which is characterized by peripheral nerve hyper-excitability which is due to continuous motor activity. The exact etiology for this condition is unknown yet there are several etiopathologies like autoimmune, genetic, or hereditary which can be an etiology for the Isaacs' Syndrome. Its clinical feature includes fasciculation, myokymia, and hyperhidrosis. To confirm the diagnosis mostly imaging methods of examination are performed like MRI, ultrasound, and EMG. In our patient MRI and EMG examination was performed. There are no particular therapeutic treatments that can help in this condition only symptomatic treatment can be delivered. Plasma exchange has a promising outcome for a moment.

Aim of the study. To propose a possible etiology of the condition and highlight effective treatment options.

Materials and methods. 51-year-old female was presented to the regional hospital of Grodno, Belarus with complaints of weakness of the hands more on the right hand, muscle twitching, and general weakness. According to her, since the summer of 2022, the above complaints have appeared. Gradually there was an increase in weakness in both hands and legs.

In February 2023, her symptoms worsened. Therefore, she decided to seek medical help. The patient presented with weakness in her hands, hypotrophy of the muscles, decreased sensitivity in her fingers, tremors in her hands, generalized fasciculation of the arm muscles, shoulder blades, and right thigh, mild paresis of the distal parts of both hands, pyramidal insufficiency of the legs and decreased vision in both eyes. Therefore, she was referred to an ophthalmologist and it was revealed the patient had retinal angiopathy. The patient also complained of mood fluctuations such as excitement, tearfulness, and insomnia. Based on medical history, patient's complaints, objective data, and neurological status the provisional diagnosis was made as ALS