



(SERPINE 1) are known to cause bleedings. This gene encodes the PAI-1 protein, an inhibitor-1 of the plasminogen activator, which is a crucial regulator of the fibrinolytic system. PAI-1 is the main inhibitor of tissue plasminogen activator and urokinase. These two proteins are the main activators of plasminogen, which convert plasminogen into plasmin.

In the case of congenital PAI-1 deficiency, the occurrence of hemorrhagic diathesis and increased tissue bleeding can be found in injured patients. 4G / 5G polymorphism in the PAI-1 gene promoter may be a risk factor for recurrent ulcer bleeding. However, the clinical significance of other variants of PAI-1 gene polymorphism has not been studied yet, although it has been noted that this can cause various disorders of thrombosis, regeneration, etc.

The study involved 60 patients with peptic ulcer disease. 42 (70%) men and 18 (30%) women aged from 21 to 83, the average age has been 52.08 ± 2.12 years. 37 (61.67%) patients have had a duodenal ulcer, and the rest (38.33%) - a gastric ulcer. 12 of them have had an uncomplicated ulcer, 3 (27.27%) females and 8 (72.73%) males, the average age has been 46.91 ± 4.04 years. 5 (8.33%) patients have had a perforated ulcer, all males, the average age has been 35.78 ± 3.48 years. 43 (71.67%) patients had ulcers complicated by acute bleeding, 14 (32.56%) females, 29 (67.44%) males, the average age has been 55.72 ± 1.81 years. In 29 (67.44%) patients the bleeding has been stopped conservatively. 11 of them (18.33%) have had an ulcer for the first time, 9 (15%) of the patients have had a history of ulcer, and 9 - a history of bleeding ulcer. 14 (32.56%) patients have had recurrent bleeding, 4 (28.57) females, 10 (71.43%) males, the average age has been 57.41 ± 3.04 years. So there has been no significant difference in demographic indicators among patients. Half of the patients have had their bleeding stopped by injecting hemostasis, and the rest - by operative treatment. PAI genotyping for G43A and 4G/5G polymorphisms has been performed in 60 patients with peptic ulcer. Among them: 12 with uncomplicated ulcer, 5 with perforation, the rest ones - with bleeding. 14 patients have had recurrent bleeding.

The genotype 5G/5G and G43A have not been detected in patients with the uncomplicated ulcer. 2. All patients with ulcer perforation have had the G43G genotype, 60% of patients have had the 4G/4G genotype, and the rest of them have had the 4G/5G and 5G/5G genotypes. The number of carriers of the 5G allele (86.05%) has been higher in patients with bleeding than in ones with ulcer perforation ($p=0.036$) and ulcer without bleeding ($p=0.021$, $\chi^2=5.32$). The number of carriers of the 5G allele has been higher in patients with recurrent bleeding (92.86%) than in ones without any relapses (82.76%). There have been no statistically significant differences ($p=0.27$, $\chi^2=0.802$). 5. The G43G homozygous genotype has been found in 94.12% of patients with peptic ulcer without bleeding, which has been statistically significantly higher ($p=0.02$) than in ones with bleeding. The A allele has been observed in 27.91% of patients with bleeding and 8.33% patients without any bleeding ($p=0.05$). The number of carriers of the A allele in patients with recurrent bleeding has been statistically significantly higher than in ones without any bleeding ($p=0.046$).

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CAUSES OF RECURRENCE OF HYPERTHYROIDISM IN PATIENTS OPERATED OF TOXIC FORMS OF GOITER

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The majority of patients surgery operated for thyroid about hyperthyroid forms of goiter in the postoperative period have functional disorders of thyroid with different degrees of severity. The most common is a decrease in thyroid function (hypothyroidism), after surgery, occurs in 20 to 70% of cases.

However, the postoperative recurrence of hyperthyroidism stay at a high level, according to various authors, occurs in 10-15% of cases of operated patients.

In this regard, the aim of our work was to identify the most likely causes of recurrence of hyperthyroidism in the remote postoperative period and possible ways to correct it.

We examined 46 patients who had a history of surgery for hyperthyroid goiter. The volume of surgery depended on the severity of thyrotoxicosis, the age of the patients, and the extent of



thyroid nodal involvement. Organ-preserving operations were mainly used to preserve macroscopically unaltered thyroid tissue.

Among the examined, 23 patients (58.1%) were not diagnosed with thyroid status disorders. Twelve patients (27.7%) were diagnosed with various degrees of decreased functional activity of the thyroid gland (hypothyroidism). These patients were prescribed long-term levothyroxine replacement therapy, depending on their thyroid status. Clinical and laboratory signs of recurrence of hyperthyroidism in the postoperative period were detected in 6 (13.7%) patients.

To determine the probable causes of recurrence of hyperthyroidism in the long term after surgery, we investigated the activity of peroxidation, antioxidant protection and immunological reactivity.

It was found that in patients with recurrence of hyperthyroidism, compared with the euthyroid state, there was an imbalance between the pro- and antioxidant systems. Namely, excessive activation of peroxide oxidation processes (increase in the level of malonic aldehyde from 5.71 ± 0.132 to 15.31 ± 0.131 $\mu\text{m/l}$; oxidative modification of proteins from 1.38 ± 0.021 to 1.44 ± 0.015 units. ml) against the background of significant inhibition of the activity of the antioxidant system (catalase from 23.37 ± 0.462 to 19.06 ± 0.661 $\mu\text{mol / min.l}$; glutathione reduced from 1.03 ± 0.024 to 0.76 ± 0.032 $\mu\text{mol / ml}$; total antioxidant activity plasma from 55.02 ± 0.241 to $47.55 \pm 0.072\%$).

It was also found a decrease in the proportion of T-lymphocytes ($56.01 \pm 1.832\%$ vs. $61.99 \pm 1.121\%$ in patients with euthyroid status), an increase in the proportion of B-lymphocytes ($32.28 \pm 1.722\%$ vs. $16.74 \pm 0.773\%$ respectively), a significant increase in the concentration of IgG (13.06 ± 1.412 vs. 10.26 ± 0.154 g / l) and CEC (124.14 ± 15.434 vs. 70.02 ± 4.051 g / l). Significantly increased levels of AT-TPO (156.07 ± 66.933 vs. 31.48 ± 5.516 IU / ml; $p < 0.01$) and AT-TG (305.91 ± 57.017 vs. 89.6 ± 8.81 IU / ml; $p < 0.01$).

The dependence of recurrence of hyperthyroidism on the volume of surgery in these patients was also analyzed. It was found that out of 5 people, the most frequent recurrence of hyperthyroidism occurred after unilateral subtotal thyroid resection (4 cases) and hemithyroidectomy (3 cases).

In patients who underwent bilateral subtotal thyroid resection (20 cases) and hemithyroidectomy with subtotal resection of the contralateral thyroid gland (13 cases), in the remote postoperative period, there was a hypo- and euthyroid state.

This indicates that an excess of left thyroid parenchyma in patients with hyperthyroid goiter is one of the causes of recurrence of hyperthyroidism in the remote postoperative period.

Thus, monitoring and effective correction of imbalances in the system of peroxidation and antioxidant protection, together with an adequately selected amount of surgery, is one of the ways to prevent recurrence of thyrotoxicosis in the remote postoperative period.

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**TRIGLYCERIDES LEVEL AS A RISK FACTOR OF THE EDEMATOUS
PANCREATITIS DEVELOPMENT FROM THE POSITION OF THE GENES *IL-4*
(RS 2243250), *TNF- α* (G-308A), *PRSS1* (R122H) and *CFTR* (delF508C) POLYMORPHISM**

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The aim of the research was to investigate the risk of acute edematous pancreatitis development according to the triglycerides level from the position of the genes *IL-4* (rs 2243250), *TNF- α* (G-308A), *PRSS1* (R122H) and *CFTR* (delF508C) polymorphism.

Genetic studies have been performed for 123 patients with acute and chronic pancreatitis exacerbation, among whom were 23 (18.7%) women and 100 (81.3%) men. The control group included 40 practically healthy individuals who were not relatives of the patients, of the corresponding sex and age. Molecular genetic studies, which included the determining of polymorphic variants of genes *IL-4* (rs 2243250), *TNF- α* (G-308A), *PRSS1* (R122H) and *CFTR* (delF508C), have been performed at the laboratory of the State institution "Reference centre of molecular diagnostics of the Ministry of Health of Ukraine" (Kyiv). The polymorphic variants of