



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  $5.71 \pm 0.132$  to  $15.31 \pm 0.131$   $\mu\text{m/l}$ ; oxidative modification of proteins from  $1.38 \pm 0.021$  to  $1.44 \pm 0.015$  units. ml) against the background of significant inhibition of the activity of the antioxidant system (catalase from  $23.37 \pm 0.462$  to  $19.06 \pm 0.661$   $\mu\text{mol} / \text{min.l}$ ; glutathione reduced from  $1.03 \pm 0.024$  to  $0.76 \pm 0.032$   $\mu\text{mol} / \text{ml}$ ; total antioxidant activity plasma from  $55.02 \pm 0.241$  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 ( $13.06 \pm 1.412$  vs.  $10.26 \pm 0.154$  g / l) and CEC ( $124.14 \pm 15.434$  vs.  $70.02 \pm 4.051$  g / l). Significantly increased levels of AT-TPO ( $156.07 \pm 66.933$  vs.  $31.48 \pm 5.516$  IU / ml;  $p < 0.01$ ) and AT-TG ( $305.91 \pm 57.017$  vs.  $89.6 \pm 8.81$  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- $\alpha$*  (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- $\alpha$*  (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- $\alpha$*  (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



analysed genes *IL-4* (rs 2243250), *TNF- $\alpha$*  (G-308A), *PRSS1* (R122H) and *CFTR* (delF508C) have been studied with polymerase chain reaction (PCR) method. The genotypes distribution among the examined patients and healthy people for the selected genes has been determined. Increasing of the triglycerides level in blood serum is an evidence of the important pathogenetic role of disintegration processes that take place in the pancreas, and of the development of active inflammatory process in the last.

The higher levels of triglycerides were observed in the carriers of NN-genotype by 12.41% and 1.57 times ( $p < 0.01$ ) in the carriers of NM-genotype of gene *CFTR*. Authentically higher by 39.61% ( $p < 0.01$ ) triglycerides level in the carriers of NM-genotype will be able to cause the formation of pancreatic pseudocysts and abscesses, as a result of enterohepatic circulation disturbance of the free fatty acids. Triglycerides level was increased by 15.33% in patients with GG-genotype and decreased by 6.75% in the carriers of NM-genotype of gene *PRSS1*. The obtained data didn't find credible difference of the influence of the gene *PRSS1* polymorphism on blood serum lipidic spectrum of the patients with acute edematous pancreatitis. The triglycerides level was decreased by 3.65% in patients with CC-genotype and increased by 40.88% in the carriers of CT-genotype and decreased by 60.58% in patients with TT-genotype of gene *IL-4* (C-590T). It has to be remarked, that these indices were authentically higher in the owners of C-allele (CC- and CT-genotype) in comparison with TT-genotype carriers by 59.04% and 2.33 times, respectively. The triglycerides level was decreased by 2.19% in patients with GG-genotype and increased by 58.39% in the carriers of GA-genotype of gene *TNF- $\alpha$*  (G-308A).

Thus, the serum triglycerides level is a risk factor for acute pancreatitis development in the examined population from the position of the genes *CFTR* (delF508C), *IL-4* (rs 2243250) and *TNF- $\alpha$*  (G-308A) polymorphism.

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#### **EFFICACY OF EARLY NEEDLE REVISION WITH 5-FLUOROURACIL AND BETAMETHASONE IN FAILING AND FAILED FILTERING BLEBS**

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Successful glaucoma filtering surgery results in the formation of a filtering bleb that has an important predictive implication in assessing the survival of glaucoma surgery [Skuta GL. et al, Wells AP. et al., 2006]. The presence of a diffuse raised bleb with a reduction of intraocular pressure (IOP) is regarded as indicative of adequate drainage and successful glaucoma surgery. Signs of a failed bleb include a flat and injected conjunctiva often with subconjunctival fibrosis sometimes with thin walled cystic spaces. Transconjunctival needle revision is an essential and simple technique in the management of failed or failing filtering bleb to restore the aqueous flow through the preexisting sclerectomy into the subconjunctival space with resultant adequate lowering of the IOP [Lee Y.S., et al., 2016]. Although the time between the trabeculectomy and the needling procedure does not seem to be a determinant of success, Rotchford A.P. and King A.J. (2008) reported better results when performing needling revisions within a three-month period after trabeculectomy in elevated blebs. It is known that 5-fluorouracil (5-FU) is a therapeutic adjunct to prevent fibroblast proliferation within the subconjunctival space and Tenon's capsule [Ewing RH et al., 1990; Durak I et al., 2003].

The aim of the study was to assess the outcomes of needle revision with 5-fluorouracil and betamethasone in failing and failed filtering blebs after trabeculectomy.

34 eyes of 34 patients aged  $55.7 \pm 14.4$  years with failing or failed blebs after initial subscleral trabeculectomy were included in study. The glaucoma diagnoses were 21 cases (61,7%) of chronic open-angle glaucoma, 8 cases (23,5%) of chronic angle-closure glaucoma, and 5 cases (14,7%) of exfoliative glaucoma. The Moorfields Bleb Grading System parameters were used for description of bleb before needling including central bleb area, maximal bleb area, bleb height, central bleb vascularity, bleb edge vascularity, and nonbleb vascularity. The preneedling IOP was  $34.9 \pm 7.4$  mm Hg. All patients received needle revision (20 patients (20 eyes) among them - with