both patients. Vaccination against encapsulated bacteria was performed at least 2–4 weeks before the operation. The surgery day was planned to be after IVIG treatment. It was recommended to start antibiotic treatment at least 3 days before the operation and continue it until at least 3 days after the operation. The patients underwent total splenectomy, distal pancreatectomy and lymph adenectomy succesfully and did not develop any postoperative complications. They were discharged with full recovery after a ten-day follow-up and it was observed that the blood values of the patients increased starting from the next day of the operation.

Discussion and conlusion: Splenomegaly's causes and its consequences in CVID are not well understood. Splenectomy proved to be an effective long-term treatment in 75% of CVID patients with autoimmune cytopenia. Splenectomy does not worsen mortality in CVID patients. Our patients also finished these operations successfully. Future trials comparing the effectiveness and safety of total and partial splenectomy are needed.

Conflicts of Interest: The authors did not specify any links of interest.

001744 | The diagnostic significance of determining TREC and KREC in congenital errors of immunity with a predominant deficiency of antibodies (CVID phenotype)

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Background: Common variable immunodeficiency (CVID) is a group of diseases characterized by impaired production of protective antibodies. The cause is a defect in the T- and B-cell link of immunity, leading to a violation of the ability to produce specific antibodies after vaccination and infections with a significant decrease in immunoglobulins. Laboratory methods of CVID diagnostics, as a rule, include: determination of serum Ig levels, determination of specific antibody production, determination of lymphocyte subpopulations in peripheral blood. The research is aimed at obtaining information about the possibility of using the definition of products V(D)J recombination of T- and B-lymphocyte receptors (TREC/KREC) in CVID.

Method: We have studied DNA of healthy children ($n=30$) aged 11.0 (11–13.0) years, patients with CVID ($n=10$). Four patients with a genetically verified diagnosis of CVID of with mutations in the *NFKB1*, *NFKB2* genes; six patients with clinical and laboratory signs of CVID without an established genetic causation aged 12.0 (11.5–12.5) years. The number of copies of TREC and KREC was determined by RQ – PCR.

The analysis of diagnostic significance has been performed by tracing of characteristic ROC curves and defining the area under the AUC curve.

Results: In healthy children, the number of TREC copies varied in the range of $1.3x10^4$ ($3.3x10^3$–$5.6x10^4$). The number of KREC copies was $4.3x10^3$ ($1.8x10^3$–$9.4x10^4$). In the group of patients with CVID, the number of copies TREC/KREC was $1.8x10^3$ ($1.3x10^3$–$2.1x10^3$) and $1.6x10^3$ ($5.2x10^2$–$2.6x10^3$), respectively.

The AUC_{TREC} for the CVID diagnostics has been equal to 0.98 $\pm$0.001 ($p < 0.0001$) with a diagnostic sensitivity 90% and specificity of 90.0%. The AUC_{KREC} has been 0.94 $\pm$0.005 ($p < 0.0001$) with diagnostic sensitivity 90% and specificity of 96%.

Conclusion: Quantification of TREC and KREC can be useful for a more complete assessment of the state of the immune system in such a heterogeneous disease as CVID.

Conflicts of Interest: The authors did not specify any links of interest.

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