

COMPARATIVE STATE OF LOCAL AND SYSTEMIC INDICATORS OF CELLULAR, HUMORAL IMMUNITY AND CYTOKINE PROFILE IN PATIENTS WITH PEPTIC ULCER BLEEDING

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INTRODUCTION. The generally accepted efficiency of modern anti-ulcer agents also did not solve the problem of gastric and duodenal ulcer, the number of patients with peptic ulcer bleeding is increased from year to year. The immune status of the organism also plays an important role in pathogenesis of gastroduodenal ulcer.

However, in patients with peptic ulcer bleeding, both local and systemic immunity, including cytokine profile was not fully studied.

THE PURPOSE OF THE STUDY. The study of some local and systemic indicators of cellular and humoral immunity and cytokine profiles in patients with peptic ulcer bleeding.

MATERIALS AND METHODS. On admission to the hospital in 154 patients with peptic ulcer bleeding (gastric ulcer — 37, duodenal ulcer — 111 and gastroduodenal ulcer — 6) was determined the content of cellular (CD3+, CD4+, CD8+ — lymphocytes) and humoral (CD19+ — lymphocytes, Ig A, M, G, circulating immune complexes (CIC) indicators of immunity and cytokine profile (TNF α , IFN γ , IL-1, 2, 6, 8 and anti-inflammatory IL-4, 10 of cytokines) in blood serum. In 107 patients local immunity were evaluated by studying lysozyme levels and IL-6 in gastric juice, and Ig A, M, G — in duodenal juice.

RESULTS AND DISCUSSION. In study of cellular immunity in patients with peptic ulcer bleeding were revealed a statistically significant decrease — in CD3+ — lymphocytes up to 32,9%, CD4+ — 32,5%, CD8+ — 13,3%, CD4+/CD8+ — 23.2% and phagocytic index (PI) — 18.9% than in healthy individuals. Also it was established disturbances in humoral immunity: a statistically significant increase of CD19+ — lymphocytes by 58.8% and CIC — 2.3 times, decrease of concentration of Ig A, M, and G respectively 16.5%, 15.8% and 10.7% ($p < 0.05$).

On background of this, there was a statistically significant increase in concentration of serum TNF α — 5.7 times, IFN γ — 5.4 times, IL-1 — 9.9 times, IL-2 — 8.7 times, IL-4 — 6.2 times, IL-6 — 12.8 times, IL-8 — 2.5 times, and decrease in IL-10 — 45.2% compared with the normal. The content of IL-6 in urine was 8.2 times ($p < 0.001$) more than in healthy individuals.

In stomach mucose the content of IL-6 by 37.5% ($p < 0.001$) and lysozyme by 38.3% ($p < 0.001$) was lower in comparison with the control group. In duodenal content was revealed decrease of Ig A, M and G respectively by 72.0% ($p < 0.001$), 55.1% ($p < 0.001$) and 37.6% ($p < 0.001$) relative to normal indicators.

CONCLUSION. Thus, studies have shown that in patients with peptic ulcer bleeding immunosuppression is observed in cell immunity with increasing levels of CD19+ cells and disbalance of immunoglobulins and cytokine status at the local and systemic level.

FORTSCHRITTE IN DER ADJUVANTEN THERAPIE DES DIABETES MELLITUS TYP 2 MIT MINERALIEN

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Bei Diabetikern des Typs II wird der insulinabhängige Stoffwechselweg zur Energiegewinnung aus Glukose entlastet, wenn ein Teil der aufgenommenen oder der aus Stärke bzw. Disacchariden freigesetzten Glukose durch käfigförmig strukturierte Aluminosilikate (Zeolithe) isomerisiert wird [S. Saravana-