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## THE IMMUNOHISTOCHEMICAL ANALYSIS OF THE DISTRIBUTION OF DIFFERENT LYMPHOCYTE POPULATIONS IN THE STRUCTURES OF THE RAT STOMACH AFTER INTRAUTERINE ADMINISTRATION OF THE ANTIGEN

*The study was performed as a part of research work "Morphological and functional features of the mucous membranes and internal organs in human and animals in norm and after antigen administration" (state registration number 0103U00939).*

**ABSTRACT. Background.** The influence of the antigen on a fetus becomes very actual topic in last 10 years. This fact is closely associated with the stimulation of immune reactions in fetus and neonatal. It is known that the delivery of antigens into the body of the fetus causes premature T-lymphocytes exit from the thymus and their migration to various organs. As a result in these organs the terms and temps of main structural components development vary. **Objective.** To study the dynamics of the distribution of different lymphocyte populations in the stomach wall in the postnatal period after an intrauterine administration of the antigen **Methods.** Rat's stomach at normal condition and after the intrauterine administration of the antigen on the 21<sup>st</sup>, 45<sup>th</sup> and 90<sup>th</sup> days of life were investigated. Immunohistochemistry, morphometric and statistical methods were used. **Results.** After the intrauterine antigen administration the content of CD3<sup>+</sup>-lymphocytes in the stomach was significantly higher, than the content of CD79 $\alpha$ <sup>+</sup>-lymphocytes. The greatest number of CD3<sup>+</sup> and CD79 $\alpha$ <sup>+</sup>-lymphocytes is observed over and under the muscularis mucosae of the stomach. In the perivascular spaces the accumulations of lymphocytes are formed; in later age periods they give rise to the perivascular lymphoid nodules. The dynamics of CD3<sup>+</sup> and CD79 $\alpha$ <sup>+</sup>-lymphocytes content changes during the intrauterine antigen administration. **Conclusion.** In response to the intrauterine administration of the antigen there is an increase in the number of CD3<sup>+</sup> and CD79 $\alpha$ <sup>+</sup>-lymphocytes. The immune response of B-cell chain is more intensive and expressed.

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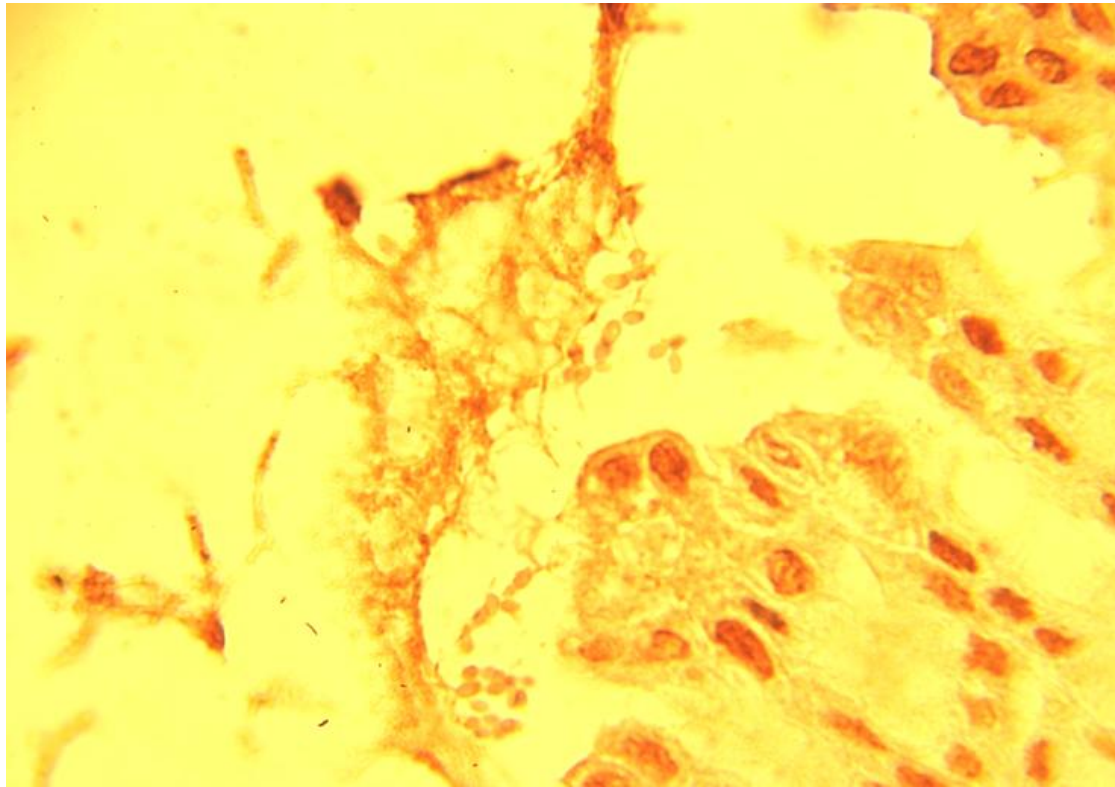


Fig. 2. CD3<sup>+</sup> lymphocytes of intraepithelial localization. 45<sup>th</sup> day of life, experimental group. ×100.

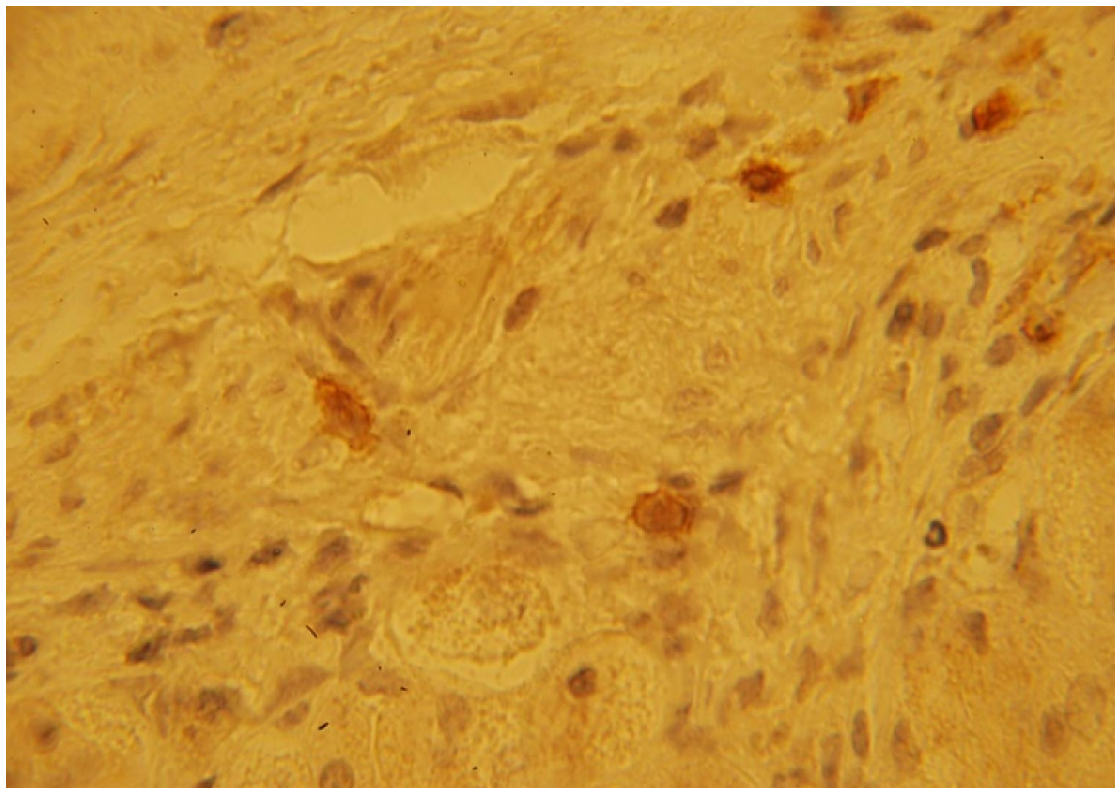


Fig. 4. CD3<sup>+</sup> lymphocytes, localized perivascularly in gastric tela submucosa. 90<sup>th</sup> day of life, experimental group. ×100.

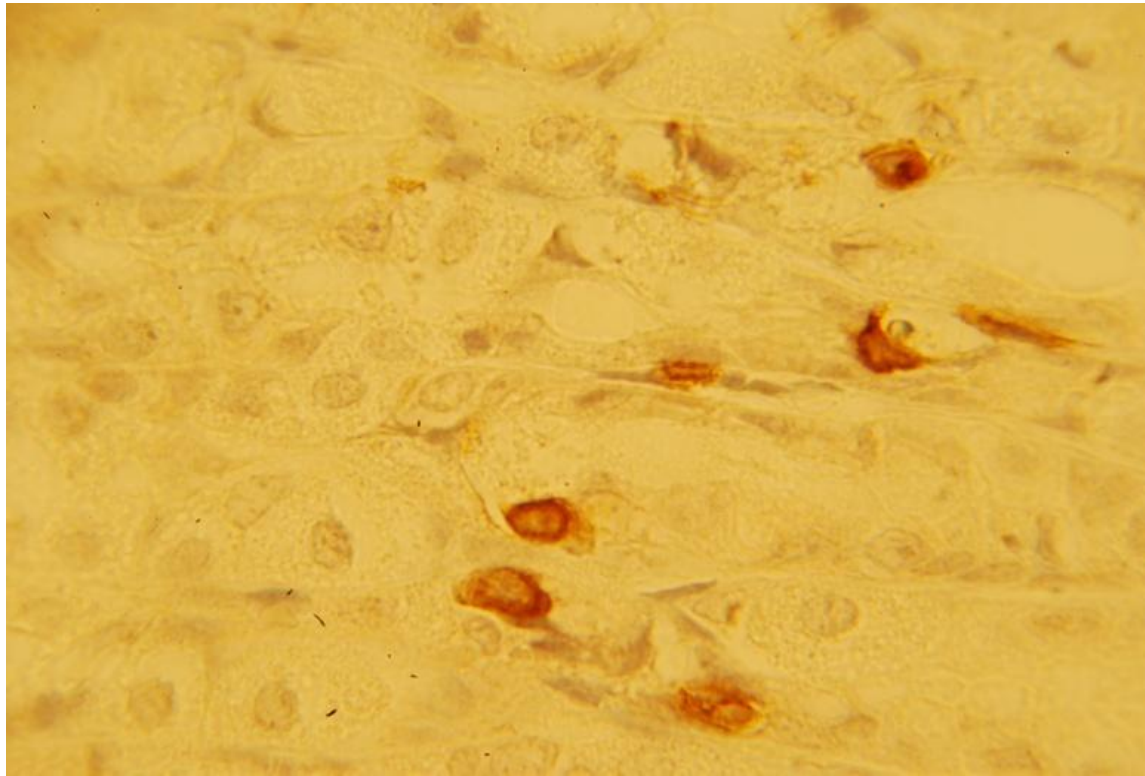


Рис. 5. CD79 $\alpha$ + lymphocytes, localized between gastric glands. 45<sup>th</sup> day of life, experimental group.  $\times 100$ .

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