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Evaluation of the Endothelial Cell Regenerative Proprieties of the Cornea in the Culture Media. Results and Prospects

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Preservation of the endothelial viability of the cornea is one of the main problems of the non-proliferative corneal transplantation, which creates a well-maintained status with the peripheral cell density decreasing throughout the life, about 30% higher than in the center of the cornea. The disruption of connections between cells adherent junctions correlates with a rapid decline of the proliferation of endothelial monostratified cells during the in vitro culture. The nutritional environment supplemented with EDTA proves that it has the ability to break the adherent junctions of the intercellular endothelial cells. The most widely used method of preservation is the cultured Tissue „C”. It provides for the endothelial cells viability for 45 day.