AMNIOTIC MEMBRANE TRANSPLANTATION: IMPORTANCE AND CLINICAL INDICATIONS

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Background. Amniotic membrane transplantation has been recently gained wide-spread attention as a new method for reconstruction of the ocular surface. It is used in ophthalmology as a substrate for the growth of epithelial cells, for tectonic support in cases of small perforations and to cover large areas of corneal and conjunctival epithelial defects.
Material ant methods. A retrospective study was done from 2020 to 2023 included 43 patients with corneal pathologies of which: 31 (72,1%) men and 12 (27,9%) women hospitalized in the Department of ophthalmology *Timofei Mosneaga* Republican Clinical Hospital to examine the indications of amniotic membrane transplantation and the surgical techniques. All patients were adults. Patients ranged in age from 27 to 100 years, predominantly from rural areas
Results. The patients who underwent membrane transplantation had the following diagnoses: corneal ulcer (60,7%) followed by eye burns (14%), conjunctival neoformations (9,4%), pterygium (6,9%), symblepharon (5%), keratouveita after the contact lens (2%) and recurrent conjunctival melanoma (2%). Of the total number of patients, 27 patients had associated pathologies such as posttraumatic keratoveitis (26%), secondary glaucoma (18,5%), corneal leukemia (14,8%), purulent endophthalmitis (11,1%), pterygium gr I-II (11,1%), hypopyon (11,1%), uveitis (3,7%) and desmetocele (3,7%). The main surgical intervention was amniotic membrane transplantation to all patients and 15 patients underwent combined surgical intervention such as pterygium excision (26,7%), restoration of the corneal defect (33,3%), blepharorhaphy (33,3%) and restoration of the conjunctiva and sclera after trauma (6,7%). Vision at initial examination was light perception to 0 for 1 patients (2,4%), 1/p.l.incerta for 6 patients (13,9%), 1/p.l.certa for 21 patients (48,9%), 0.01 – 0,1 for 9 patient (20,9%) and 0,1 – 0,3 for 6 patients (13,9%). Predominantly patients aged between 60-70 years (27,9%), then 50-60 and 80-90 years (16,4%).
Conclusions. Amniotic membrane transplantation has high success rates and is clinically useful due to its unique structure, biocompatible composition, subsequent biological functions and has a multitude of ophthalmological indications such as persistent epithelial defects, partial limbal stem cell deficiency, bullous keratopathy and corneoscleral ulcers.
Keywords: amniotic membrane, transplant, ulcer, ocular surface.