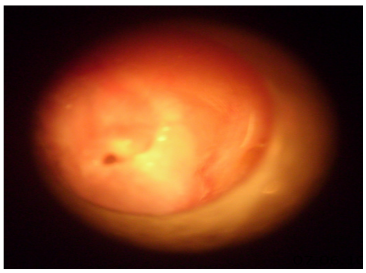
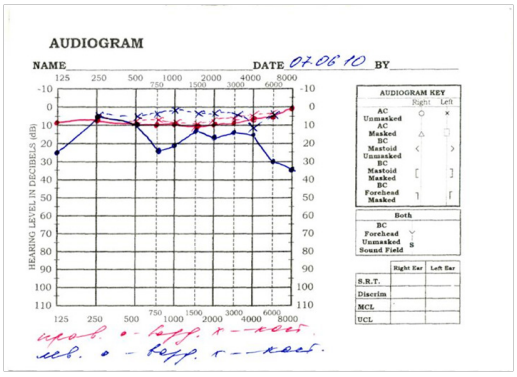
Processes of regeneration of tympanic membrane became active after transplantation of fetal fibroblasts. Maximal reconstruction of tympanic membrane was noticed 1 month after conducted therapy and complete reconstruction had been indicated by 1,5 months from the moment of transplantation. Tympanic membrane was grossly presented by thin strained film with apparent processes of neoangiogenesis (fig.3).



Pic. 3. Otoscopic image - tympanic membrane of patient A., 25 years old через 1,5 months after transplantation of fetal fibroblasts.

Auditory acuity augmentation was happening together with tympanic membrane reconstructive regeneration acceleration process and its complete reconstruction. Thus, analysis of audiometric study identified significant improvement of hearing parameters 6 weeks after treatment, and complete reconstruction was identified in 7 weeks (fig.4).



Pic.4. Audiogram of patient A., 25 years old 1,5 after cell transplantation.

During the monitored period of time the patient subjectively observed improvement of his general state, performance capability. Changes in indications were not registered in patient's general and biochemical blood analysis, which were conducted in control points (prior to therapy and и 7, 15, 30 and 45 days after transplantation of fetal fibroblasts) изменений показателей не отмечено.

Conclusion: In summary, application of cell technologies, in particular of fetal fibroblasts at tympanic membrane defects encourages full regeneration of tympanic membrane and reconstruction of hearing.

Biography

Dossova Aigul in 1995 she graduated Karagandy State Medical University by the specialty "Medical care". Since 1995 till 1997 – research assistant in Otolaryngology department. 1997 – 2000 – Doctoral student in the same department. In 2001 – defense the work on the topic: "Clinical and Pharma-kynetic argumentation of lymphatic acute otitis media and estimation its efficiency". Since 2002 she has been working for JSC National Scientific Medical Research center on the position of leading research worker of the department of organ and cell transplantation. She is a developer of cellular therapy at diseases of otitis media and internal ear in Kazakhstan. She is an author of different works concerning indicated problem.

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