

EXPERIMENTAL JUSTIFICATION OF EAR TAMPONADE AFTER SURGERY

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Introduction. An experimental preclinical animal study was conducted to study the biocompatibility of a cellulose-based tampon.

The aim is to improve the ear rehabilitation process in the early postoperative period, by using a cellulose tampon for the ear tamponade.

Research material imprints of the external auditory canal of laboratory animals.

Research methods cytological study of imprints of the external auditory canal of laboratory animals. Rabbit species *Shinshilla* 36 pcs were divided into 3 groups of 12 pcs each and a control group of 6 pcs. After performing miringotomy, various types of tampons were placed in the auditory canal of rabbits – a pulp tampon, a Merocel tampon, and a gauze tampon. On the 7th, 14th and 21st days after the operation, wound prints of the external auditory canal of laboratory animals were examined. In each group changes in cell elements in the inflammation focus were evaluated in dynamics.

In the control group, corneal cells of the epidermis were found in swabs from NSP.

On the 7th day after the operation, the small amount of corneal cells of the epidermis and polymorphic flora in imprints were observed in all groups. On day 14, seedling epidermis cells and polymorphic flora were observed in moderate amount in all groups, neutrophil leukocytes in the cellulose tampon and Merocel tampon group were (+), in the gauze tampon group (+ + +). On the 21st day, in all groups, the seedling cells of the epidermis were observed, in groups with the Merocel tampon and the gauze tampon polymorphic flora was shown in a small amount.

Cytological analysis of the cellular composition of rabbit ear canal imprints showed that the inflammatory process in three groups of laboratory animals passed the same.

Conclusions. Cellulose is a bioinert material, and cellulose tampon is a safe item, which does not cause disruptive homeostasis and severe local reaction in the auditory passage of the rabbit. Taking into account the experimental data obtained and the successful experience of application in other fields of surgery, cellulose can be considered as a material for the manufacture of a tampon for tamponade of the external auditory canal, followed by clinical trials.