

Review of Otoplasty Techniques – Animal Models as Alternatives for Surgical Practice

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Abstract

Ethical and financial issues make access to human cadavers for surgical practice more and more difficult, so it became clear that the need for training must find surrogate solutions. Animal experimental models have been introduced in the training process of young doctors to ease the acquisition of new skills. Otoplasty represents a surgical intervention meant to restore the aesthetic aspect of one's appearance. The majority of the procedures are done for defects of the external ear that alter the patient's self-confidence. An implication of otoplasty surgery is the psychosocial impact that the intervention has on the subject. Even though the complication rate is not that high, it is important to aim for the finest result. Therefore, it is essential that young doctors practice the surgical steps until they reach a level of mastery. In this field, the most used animal models are the pig and the rabbit, because they have similar anatomy, and are easy to obtain. The aim of this study is to review the most used otoplasty techniques and their applicability to experimental animal models, to establish which the advantages of each model are, and to assess what the prospects of new technologies in the field of surgical training are.

Keywords: otoplasty, training, animal model, experimental surgery, surgical technique