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# Staged Reconstructive Surgery of Stenosis of the Larynx And Trachea

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**Annotation.** This article discusses Staged reconstructive surgery of stenoses of the larynx and trachea.

**Keywords:** implantation materials, trachea, laryngeal-tracheal stenosis, reconstructive surgery, computed tomography, endoscopic surgery.

In modern otorhinolaryngology, the treatment of patients with laryngeal-tracheal stenosis is a serious problem. Rehabilitation of this category of patients requires the fulfillment of several conditions: trained medical personnel, technical support for all stages of reconstructive operations, and the possibility of postoperative observation of patients.

Cicatricial tracheal stenosis is a disease associated with the replacement of the normal tracheal wall with coarse scar tissue, narrowing the lumen of the airway. This process can be combined with the loss of the tracheal wall's frame function and the appearance of areas of tracheomalacia.

Despite the successes of laryngeal-tracheal surgery, the number of patients with stenosis of the larynx and trachea is growing and does not tend to decrease. The causes of cicatricial stenosis of the larynx and trachea are intubation and iatrogenic injuries of the upper respiratory tract, external neck injuries with damage to the cartilage of the larynx and trachea, thermal inhalation and chemical damage to the respiratory tract, inflammatory and viral diseases of the larynx and trachea, tumor diseases of the larynx, trachea and thyroid glands, operations on neck vessels. Diseases of the thyroid gland, requiring surgical treatment, are the main cause of disturbances in the innervation of the larynx in the form of paresis and paralysis.

The variety of etiological aspects requires a multidisciplinary approach to the rehabilitation of patients with laryngeal-tracheal stenosis. However, the treatment of patients with laryngeal paralysis and combined laryngeal-tracheal stenosis falls only within the competence of otolaryngologists and is included in the list of high-tech methods.

The complexity of surgical treatment of such patients is due to several reasons: the general severe condition of patients in cases of decompensated stenosis or severe concomitant pathology, surgical access in case of violation of anatomical landmarks, the presence of combined lesions of the larynx and trachea.

In the postoperative period, with the help of prosthetics, the structures of the larynx and cervical trachea were formed. The laryngeal-tracheal prosthesis was changed as needed, first once every 4-5 days, then every other day, and then removable tracheal stents day and night. Restoring breathing



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through natural pathways was an important positive factor in the rehabilitation of the functions of the larynx (respiratory, separation, vocal) and the patient as a whole. This tactic made it possible not only to monitor the healing process in the surgical area daily but also to restore all functions of the larynx and trachea in a short time, which had a very beneficial effect on the condition of the patients. Decannulation of patients with bilateral paralysis after laryngoplasty was carried out 8-10 days after surgery.

Thus, a differentiated approach to the treatment of patients with laryngeal-tracheal injuries of various etiologies made it possible to rehabilitate the majority of treated patients.

To sum up, we can draw the following conclusions:

- ➤ Patients with laryngeal-tracheal stenosis make up 7.7% of the total number of otorhinolaryngological patients, this statistic tends to increase.
- ➤ The main method of treatment for patients with bilateral laryngeal paralysis and combined laryngeal-tracheal stenosis is functional reconstructive surgery with a differentiated approach depending on the presence of factors influencing the outcome of treatment.
- Modern methods of studying the larynx and trachea make it possible to determine the presence, size, structure, location, and relationship of anatomical formations in the area of damage to the larynx and trachea, determine the optimal tactics for treating patients, and objectively assess the effectiveness of the treatment.
- ➤ The results of surgical reconstruction are closely related to the algorithm of pre-and postoperative patient management, the use of modern, physiological laryngeal-tracheal prostheses, and the necessary conservative therapy.

#### List of used literature

- 1. Русаков М.А. Эндоскопическая хирургия опухолей и рубцовых стенозов трахеи и бронхов// Российский научный центр хирургии, РАМН. М.: 1999. С.5-42.
- 2. Черняховская Н.Е. Современные технологии в эндоскопии// Российская медицинская академия последипломного образования. М.: 2004. С.6-88.
- 3. Паршин В.Д. Хирургия рубцовых стенозов трахеи. М.: Медицина, 2003. С. 152.
- 4. Zaid E. Deeb, Jeck. B. Willuams. Erly diagnosis and treatment of laryngeal injuries from prolonged intubation in adult// Otol. Head and Neck Surgery, January 1999, p. 25 -29.
- 5. Grillo H.C., Donahue D.M., Mathisen D.J., Wain J.C. Wright CD. Postintubation tracheal stenosis. Treatment and results. J. Thorac. Cardio-vasc. Surg. 1995;109: 486-92.

