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MICROLARYNGOSCOPY AND MICROLARYNGOSURGERY IN THE DIAGNOSIS AND TREATMENT OF PRECANCEROUS DISEASES AND NEOPLASMS OF THE VOCAL ORGANS FOLDS

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Surgical treatment of patients with precancerous diseases of the larynx is an effective way to prevent cancer, and a thorough histological examination of the removed tissues makes it possible to identify foci of malignancy. The percentage of malignancy of precancerous processes, according to various authors, ranges from 5 to 30 (4.). It should be noted that the percentage of malignancy in various groups of precancerous and precancerous diseases (dyskeratosis, hyperplastic laryngitis, papillomatosis) has a similar spread (1).

However, the widespread method of removing precancerous formations and cancerous tumors of the larynx under local anesthesia using indirect laryngoscopy encounters a number of difficulties. It is not always possible to obtain material for histological examination from the lesion, and therefore repeated biopsies are often required (2). The discrepancy between clinical and histological diagnoses, according to the first biopsy performed with indirect laryngoscopy, is quite significant and reaches 30.5% for precancerous diseases and neoplasms in general. At the same time, histologically, the diagnosis of cancer, pronounced clinically, was not confirmed in 36.3% of the examined (5).

With the use of subcutaneous direct laryngoscopy, which allows total excision of a precancerous focus and limited neoplasms, the percentage of malignancy detection increased. Cancer in situ and initial invasive cancer were diagnosed by a number of researchers in 11.5—25% of patients who were assumed to have only a precancerous disease before the biopsy (1).

In the clinic, microlaryngoscopy and microlaryngosurgery were performed using direct Killian laryngoscopy under endotracheal anesthesia with oral intubation and using Seifert reference laryngoscopy (Kleinsasser modification) under injection anesthesia.

Microlaryngoscopy was performed in 118 individuals aged 15 to 76 years with precancerous lesions and neoplasms of the vocal folds. There were 55 patients under the age of 50 and 63 over the age of 50. 106 men were examined, 12 women.

All patients complained of hoarseness. The duration of the disease ranged from 3 months to 6 years, averaging 8-10 months in most patients. With indirect laryngoscopy, the formation was determined on a wide base, which occupied two thirds or almost the entire vocal fold. At the same time, the mobility of the larynx was preserved in full and the regional lymph nodes were not palpated.

In 100 patients, the process was one-sided, and in 18 the lesion spread to both folds. In all patients, simultaneous total removal of the pathological focus with indirect laryngoscopy turned out to be impossible. With the help of microlaryngoscopy, the prevalence of the process was clarified and the volume of surgical intervention was determined: chordectomy was performed in 48 individuals,

decortication of the vocal fold was performed in 27, and formation with a portion of the mucous membrane was removed from the remaining 43.

Based on morphological examination, cancer of various degrees of maturity was diagnosed in 41 patients, papilloma in 13, hyperplastic laryngitis in 12, dyskeratosis (leukoplakia and leukoceratosis)— at 12, edematous laryngitis (so-called edematous fibroma and Reinicke—Gayek edema)- in 37, posttraumatic (intubation) granuloma — in 3.

Cancer of the vocal fold was found in 41 patients, mainly in people aged 50-60 years. The ratio of men and women was 39:2= 18.5:1. The average period from the moment of the first symptom to the start of treatment varied widely — from 1 month to 6 years, on average it was 1 year. During microlaryngoscopy, the type of neoplasms was different and in most cases difficult to distinguish from benign diseases. In 27 of 41 patients, the tumor had the appearance of an exophytic formation with areas of keratinization and ulceration, in 6 it represented bright red papilloma-like growths, in 9 it was in the form of edematous fibroma located along the free edge of the fold. The neoplasm occupied the anterior two-thirds of the vocal fold and was localized in the area of the vocal process of the arytenoid cartilage in only 2 people. In 24 patients, the tumor was tightly fixed to the vocal fold. These individuals underwent a chordectomy, the rest underwent decortication or the tumor was removed from the area of the surrounding mucous membrane, retreating 1-2 mm from the edge of the neoplasm. Microlaryngoscopic control clinically confirmed the radical removal of formations in all observations.

Morphologically, 14 out of 41 patients showed malignancy of hyperplastic laryngitis and dyskeratosis. In all patients, it was an early form of cancer: cancer in situ — in 5, initial invasive cancer —• in 9, which accounted for 11.8% of the total number of people with precancerous diseases and neoplasms of the vocal folds. In 3 out of 5 patients with cancer in situ, a micromorphological examination confirmed the radicality of tumor removal. They did not receive radiation treatment. The follow-up periods, in which there were no signs of relapse, ranged from 1 to 2 years. In 2 other cancer patients, bilateral lesion of the vocal folds was noted on the spot, they underwent decortication on both sides. Histologically, multiple foci of mitosis were identified, and therefore they were prescribed radiation treatment according to a radical program (60 Gy per focus). There are no signs of relapse with follow-up periods from 1 to 4 years.

Radiation treatment according to the radical program was also carried out in all other patients with typical squamous cell and invasive cancer. It was successful for 32 out of 36 people in this group. The follow-up period for these patients ranged from 1 year to 6 years, and no relapses were found in 25 individuals for more than 3 years. Radiation therapy was ineffective in only 2 of the examined patients. 1.5 and 2 months after irradiation, they underwent surgical intervention — extirpation of the larynx, but a month later metastases appeared in regional nodes and distant organs. The conducted polychemotherapy was also unsuccessful. In 2 people, after 1 and 1.5 years, relapses of the disease occurred, complicated by chondroperichondritis, in connection with which they underwent extirpation of the larynx. During 1.5 and 2 years, there was no recurrence of cancer and metastases.

Microsurgical removal of laryngeal papillomas in 13 people turned out to be quite effective. In 3 patients, this neoplasm appeared at the ages of 1, 3 and 4 years, respectively, and did not disappear spontaneously during puberty. Previously, these individuals had repeated papilloma removal and podophylline treatment. Subcutaneous microsurgical removal was successful in all 3 individuals with follow-up periods of 4 and 5 years. In 3 patients who had laryngeal papillomatosis after 40 years, relapses of the disease occurred after 2, 4 and 6 years, respectively. He performed repeated microsurgical excision of papillomas.

The presence of hyperplastic laryngitis and dyskeratosis was histologically proven in 38 individuals. In 14 people, an early form of cancer was detected — cancer in situ and initial invasion. The remaining 24 patients showed no signs of malignancy of the process. The microsurgical removal was successful.

Relapses of the disease were noted in 2 patients after 1 year and were also easily eliminated by microsurgery.

Edematous laryngitis and posttraumatic granuloma could not always be distinguished from precancerous diseases or cancer. Microsurgical removal of edematous tissue, as well as granulomas, took place without any difficulties in all 40 observed patients. Histologically, no malignancy was observed in any case, and there were no relapses of the disease either. The follow—up period is from 1 year to 6 years.

Thus, without resorting to external access (to thyroidectomy and laryngotomy), we have successfully applied microsurgery to remove significant lesions of the vocal folds, as well as to detect early forms of cancer and treat people with precancerous diseases.

In the water

1. In difficult cases of diagnosis, microlaryngoscopy should be widely used to detect early forms of cancer.
2. Currently, microlaryngosurgery is the most gentle and effective treatment for people with precancerous diseases of the larynx.
3. Microlaryngosurgery can be successfully used for total biopsy and removal of significant vocal fold neoplasms.

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