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CANCER RESIDUE OF THE THYROID GLAND AFTER THE ORGAN PRESERVING OPERATIONS

[1]Mykhaylichenko V. Yu., [2]Zhadko S. I., [3]Bezrukov O. F., [4]Pritulo L. F., [5]Samarin S. A., [6]Sulima A. N.

[1]Doctor of Medicine, Professor, Department of General Surgery - "V. I. Vernadsky Crimean Federal University" Medical Academy named after S. I. Georgievsky (structural subdivision) – pancreas1978@mail.ru, [2]Doctor of Medicine, Professor, Department of Orthopedic Dentistry- "V. I. Vernadsky Crimean Federal University" Medical Academy named after S. I. Georgievsky (structural subdivision) – profsizh@gmail.com, [3]Doctor of Medicine, Professor, Department of Surgery № 2 - "V. I. Vernadsky Crimean Federal University" Medical Academy named after S. I. Georgievsky (structural subdivision) – klinika_csmu@mail.ru, [4]Doctor of Medicine, Professor, Department of Pediatric Surgery with the course of Urology- "V. I. Vernadsky Crimean Federal University" Medical Academy named after S. I. Georgievsky (structural subdivision) – kafedradx@mail.ru, [5]Candidate of Medical Sciences, Associate Professor, Department of Anesthesiology, Resuscitation and Emergency Medical Care "V. I. Vernadsky Crimean Federal University" Medical Academy named after S. I. Georgievsky (structural subdivision) – samarinmd@gmail.com, [6]Doctor of Medicine, Professor, Department of Obstetrics, Gynecology and Perinatology № 1 - "V. I. Vernadsky Crimean Federal University" Medical Academy named after S. I. Georgievsky (structural subdivision) – gsulima@yandex.ru.

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Abstract:

Aim. To study the percentage of cancer in the residue of the thyroid gland after organ-preserving surgery on the thyroid gland for benign pathology.

Materials and methods: *The study was based on the analysis of 2431 histories of patients who underwent various surgical interventions in connection with benign diseases of the thyroid gland more than 10 years ago. Among these patients 1948 patients were female, which is 80.1% of total amount of patients. The age of patients ranged between 18 to 74 years, an average of 56.7 years. The patients were monitored by the staff of the centers with terms from 5 to 30 years. Naturally, the purity of the experience was disturbed by the fact that we selected only those patients who were recorded in the database and the archive of hospitals, of course this is not all treated and not all were observed in the remote postoperative period.*

Results: *It has been established that residual cancer occurs in 3% of all cases of operated patients and in 25.9% of patients who had a thyroid residue. It should be emphasized that most often Residual cancer occurs in patients with diffuse toxic goiter. On the basis of what the authors believes that in case of the hormonal instability of the thyroid residue with diffuse toxic goiter, thyroidectomy should be performed.*

Conclusions: *The main factor in the recurrence of differentiated thyroid cancer is organ-preserving operations in any volume, as well as not removed lymph nodes with non-diagnosable metastases. Although Dissimilar data after 5years -30 occurrence of cancer in the remainder of the thyroid gland is found according to our observations at 25,9% of cases, when it occurs in DTZ 8, 9% than at other benign pathologies of the thyroid gland.*

Key words: *cancer of the residual thyroid gland, volume of operation.*

Corresponding author:
Prof. Dr. Vyacheslav Mykhaylichenko,
MD, Department of General Surgery
Medical Academy named after S. I. Georgievsky of Vernadsky. CFU
5/7, Lenin Avenue, Simferopol, Russian Federation, 294006
E-mail: pancreas1978@mail.ru.

QR code

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INTRODUCTION:

Despite the large number of works and algorithms for treating thyroid cancer, the number of patients with this pathology is steadily increasing [2, 3, 4, 6]. In the last few years on various topics thyreology The extent of surgery and the risk of recurrence of thyroid cancer after various treatment methods and volumes of surgery, as well as the risk of cancer in the thyroid tissue, after organ-sparing thyroid surgery for benign diseases, is constantly debated.

According to the standards of the American Thyroid Association, (American Thyroid Association Management Guidelines for Adult Patienties with Thyroid Nodules and Differentiated Thyroid Cancer , 2015), European Society of Medical Oncology (Thyroid cancer : ESMO Clinical Practice Guidelines , 2012) , a conciliation commission of oncologists and endocrinologists of the Russian Federation signed in 2007, hemithyroidectomy should be the minimum radical operation for thyroid cancer . Several centers believes that performing organ preserving operations such as 'subtotal resection of the thyroid' is unjustified volume of surgical treatment for differentiated thyroid cancer due to the high frequency of degenerative changes in thyroid residue structure even in the absence of hypothyroidism and statistically significant differences in the volume of thyroid residue after 'subtotal resection of thyroid' and hemithyroidectomy , impossibility monitoring thyroglobulin and using a full-body scan from 131 I in the long term to determine a recurrance of disease and appearance of distant metastases [7]. After the inadequate operation , some surgeons believe that it is necessary to monitor patients, and chance of recurrance is defined in 0,9-26,4%, while others believe it is necessary to do immediately transoms thyroid tissue and confirmed by histologycal recurrence [4]. After the first and repeated iodine therapy, patients were monitored as dynamic monitoring of TG and AT-TG levels every 3 months during the first year and every 6 months in subsequent years, as well as using ultrasound of the thyroid gland. A marker of relapse is considered an increase in TG of more than 5 ng / ml while receiving synthetic analogues of thyroid hormones and more than 2.5 ng / ml against the background of suppression of suppressive therapy, as well as an increase in AT-TG titer of more than 20 IU / ml 6months after radioiodine therapy, these indicators were regarded as a recurrence of the disease [1]. According to other authors, performing thyroidectomy with central lymph node dissection, on the papillary and follicular thyroid cancer recurrence was detected in 2.04% cases and 7.8% cases respectively, requiring repeated interventions [5] . With an increase in the size of the primary tumor, the probability of detecting residual tumor tissue and regional metastasis of the thyroid gland was higher [4]. It has long been established that the main risk factors for the development of marker relapse in patients with differentiated thyroid cancer are: 1) organ preservation tactics at the surgical stage of the combined treatment; 2) the spread of the tumor process in the regional lymph nodes; 3) the presence of a significant thyroid residue after surgery according to thyroscintiography with Tc-99t-pertechnetate; 4) insufficient depth of hypothyroidism before the introduction of I 131; 5) the introduction of activity less than 3.0 GBC with the first radioiodine therapy ; 6) non-observance of the suppressive mode of hormonal therapy after radioiodine therapy [1] .In cases of inadequate surgeries for differentiated thyroid cancer, all patients should be offered repeated surgeries in the early stages. Minimal reoperation volume - thyroidectomy with central lymphadenectomy [4]. Naturally, there are groups of patients with different risks of recurrence of thyroid cancer and some researchers recommend sticking to them and immediately determining the extent of surgery [6]. The scope of operations for benign thyroid diseases is also constantly debated in the literature, as it varies from the most organ-preserving

thyroidectomy, and performed both traditionally and video-assisted or endoscopically [8.9,11]. Some researchers recommend a differentiated approach to the volume of surgical intervention, depending on the nosology, so when mixed toxic goiter - thyroidectomy; in toxic adenoma - hemithyroidectomy; in patients with diffuse toxic goiter - subtotal resection of the thyroid gland, multisite euthyroid goiter - thyroidectomy, with nodular goiter -hemithyroidectomy [12].

The aim is to study the percentage of cancer in the residue of the thyroid gland after organ-preserving surgery on the thyroid gland for benign pathology.

MATERIAL AND METHODS:

The study was based on the analysis of 2431 histories of patients operated more than 10 years ago in the clinic of surgery of the Clinical Medical Center of St. Luke (Simferopol) and on the division of surgery of the Institute of Emergency and Restorative Surgery. VC. Husak (Donetsk, DNR). Among these patients 1948 patients were female, which is 80.1% of total amount of patients. The age of patients ranged between 18 to 74 years, an average of 56.7 years. Thyroid disease, about which patients were operated on and the types of operations, is presented in Table 1.

The patients were monitored by the staff of the centers with terms from 5 to 30 years. Naturally, the purity of the experience was disturbed by the fact that we selected only those patients who were recorded in the database and the archive of hospitals, of course this is not all treated and not all were observed in the remote postoperative period.

Table 1. The distribution of patients by nosology and type of surgery, as well as the occurrence of thyroid cancer

Nosology	Hemichi-rheidec-tomy	Subtotal resection of the thyroid gland	Thyroidectomy	Atypical thyroid resections	Total	Cancer residue tissue	
						Andbs .	%
Nodular goiter	781	-	-	194	975	12	1.2
Polynodosegoiter	-	142	133	96	371	9	3.8
DTZ	-	348	241	-	589	31	8.9
Toxic adenoma	98	-	-	64	162	eight	4.9
Mixed toxic goiter	-	195	139	-	334	1 4	7.1
Total	879	685	513	354	2431	74	3

RESULTS AND DISCUSSION:

Based on the data in Table 1, we see that thyroid cancer is more often developed in autoimmune pathology. According to the volume of the removed thyroid tissue, surgical interventions were performed as follows: hemithyroidectomy in 879 patients– 36.1% of cases, subtotal resection of the thyroid gland in 685 patients –28.2% of cases, thyroidectomy in 513 patients–21.1% of cases, atypical resections in 354 patients of the thyroid gland - 14.6% of cases. It should be noted that such variation in the volume of surgical interventions is associated with a revision of views on this problem, as in recent years, when mixed toxic goiter and diffuse toxic goiter, as well as polynodose goiter, thyroidectomy is performed. So with nodular goiter, it occurred in 1.2% of 975 patients, with a polynodose goiter in 3.8% of 238 (as we calculate from the total number of patients the number of thyroidectomy performed), with toxic adenoma - in 4.9%, mixed toxic goiter - 7.1% and DTZ - 8.9%. The data obtained in our study can be challenged on a sample of patients, the quality of the performance of histological research (are we not seeing a relapse, although it is unlikely for more than 5 years). Despite this, thyroid cancer is 25.9%, among the entire sample, this figure is 3%. If we consider that patients with residual thyroid tissue in DTZ do not respond well to the selection of a dose of thyroid replacement drugs and, depending on the activity of the autoimmune process, they change hyperparathyroidism for hypothyroidism, we do not consider it appropriate to perform this type of surgery.

CONCLUSION:

The main factor in the recurrence of differentiated thyroid cancer is organ-preserving operations in any volume, as well as not removed lymph nodes with non-diagnosable metastases. Although Dissimilar data after 5years -30 occurrence of cancer in the remainder of the thyroid gland is found according to our observations at 25,9% of cases, when it occurs in DTZ 8, 9% than

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