Budnik A.F., Musukaeva A.B., Pshukova E.M., Zakhokhov R.M.

Tumors of Thyroid in Kabardino-Balkarian Republic

ABSTRACT

184 biopsy materials have been investigated since 2013 (16 men and 168 women aged from 89 to 18). Among men middle age of patients amounted to 38,1±12,2, among women 49,2±13,1. Different types of tumors were found out in 67 cases, that was 36,4% of all thyroid pathology. The most frequent kind is a follicle adenoma - 42 supervisions (64,6% of all tumors), 13 from these cases combine with nodular goiter (20% of all tumors) and 4 cases (6,2%) with autoimmune thyroids. Malignant tumors were found out in 25 cases, the most frequent kind is a papillary cancer (19 cases - 28,4%). Other kinds: medullar cancer and undifferentiated cancer for 2 cases (3%), follicle cancer and combination of follicle chasse with papillary for to a 1 case (1,5%).

Keywords: thyroid, cancer, tumors, endocrine system.

Kabardino-Balkarian republic refers to the regions with a low content of iodine in water and soil. The morbidity of thyroid cancer depends on action duration of iodic deficit and his severity [4].

Thyroid cancer is the most widespread tumor of the endocrine system [2, 6]. In Russia 1,8% are noted in the structure of general morbidity of thyroid tumor, for men - 0,5%, for women - 2,9%. The morbidity of thyroid malignances is characterized by evident positive dynamics [6]. For determination of a role of endemic goiter further researches are needed in epidemiology of thyroid tumor [4].

Thyroid tumors are a very heterogeneous group both on a morphological structure and on a clinical flow. The preoperated diagnostics of these tumors in spite of modern achievements of thyroidology remains at a level from 30 to 70% [1, 2, 3, 7].

Research aim: to conduct the analysis of biopsy material for research of the age-related and sexual features of thyroid tumors in KBR and their connection with other diseases of organ. To confront the results of preoperated and morphological diagnostics for the development of methods of improving surgical help to a patient with this pathology.

MATERIALS AND METHODS

The analysis of operationally-biopsy material of GKUZ "Pathoanatomical bureau" MH of KBR was carried out for 2013. Macroscopic description of objects and histological

conclusions are analysed in all cases. All histological preparations were made on standard methodology, painted by a hematoxylin and eosin, investigational by means of light microscopy.

RESULTS AND DISCUSSION

A common amount of cases was 182 for a year. Distribution of material on sexual character is the following: 16 men and 168 women. Age of patients from 89 to 18. Among men the middle age of patients amounted to 38,1±12,2, among women 49,2±13,1.

On results research the next groups of pathological processes were distinguished: goiter (111 cases - 60,3%), thyrioditis (6 cases - 3,3%), of high quality tumors (25 cases - 13,6%), malignant tumors (18 случаев - 9,8%,), combine defeats (24 cases - 13 %).

Goiter is diagnosed in 5 cases for men and in 106 cases for women, a prevailing form is a diffusely-colloid goiter.

The inflammatory diseases of thyroid were presented by autoimmune thyrioditis of Hasimoto, for men not a single case is marked, for women - 6 (3,3% from a general amount).

The high quality of thyroid tumors are presented by follicle adenoma, 25 of them being revealed on our material. For men this diagnosis meets in 3 cases, middle age of patients 43,3±6,5; women have 22 cases of disease, middle age 38,7±15,2. Age of patients from 76 to 18, most cases were on 30-40 (7 cases - 31,2%) and 50-60 (5 cases - 22,7 %). Correlation of men and women was 1x7, 3. Unlike men follicle adenoma for women is diagnosed in younger and more mature age. These data coincide with data of other researchers [5]. In all presented cases the single incapsulated tumor knot was sized from 2 to 5 cm, surrounding fabric norm follicle structure. In most cases in the tumor there were circulatory disorders expressed in a different degree, forming of cystoid cavity in some cases. In one of investigational biopsies (a woman aged 68) in the cellulose a parathyroid gland of normal structure was found. Clinically adenomas were recognized in 18 cases, making 72%. Those researches in that the diagnosis of adenoma was proposed morphologically, in a clinical conclusion had a "nodular goiter".

Malignant tumors among all diseases of thyroid made 9,8% (18 cases) for a year. For men there were 2 cases of papillary cancer, age of patients being 24, 26 and 43, no metastases are present. One of the cases is diagnosed clinically, in others a diagnosis was proposed "nodular goiter". For the women of malignant tumors of thyroid found out 15. Among them a prevailing form is a papillary cancer - 11 patients from 48 to 89. Middle age of patients in this group 65,1±12,9. Clinically the diagnosis of malignant tumor is proposed in 8 cases (72,7 %), in the cases of divergence the preoperated diagnosis was: key goiter (1 case), cystoadenom (2 cases). Metastases in lymphonoduss found out in one case (9 %), germination of capsule of gland in

three cases (36,4 %). In one case from investigational the knots of papillary chasse were found out in both stakes of thyroid - for the woman of 64.

In addition, from malignant tumors for women were discovered: follicle cancer (2 cases) medullar and undifferentiated on one case. One of cases (woman 45) of follicle chasse interesting that there were knots of papillary chasse in a contralateral stake and isthmus of gland, in lymphonoduss are his metastases. A tumor is recognized clinically. Medullar carcinom found out for the woman of 52 with a clinical diagnosis key goiter. An undifferentiated cancer met for a patient 48, accompanied by metastases in lymphonoduss, a clinical diagnosis is an adenoma.

The defeats of thyroid on our material are presented by next variants:

1) 13 cases (7,1% from the incurrence of supervisions) of follicle adenoma on a background a diffuse colloid goiter. From them there is one man age of that 64, an adenoma clinically is not recognized. Age of women 74 from 37 to, from 12 investigational cases in 6 an adenoma was educed clinically. Goiter in surrounding the tumor of fabric mainly macro- and microfallicular (mixed), the morphological signs of hyperfunction found out in three cases from 12 (25 %).

2) 4 cases (2,2%) of follicle adenoma on a background autoimmune thyroiditis for women 49 from 26 to. In one of these supervisions "adenoma" in a clinical diagnosis was absent.

3) 6 cases (3,3% from an incurrence) of combination of malignant tumors with a key colloid goiter. In this group there are 3 patients of sex of men are 2 cases of papillary carcinom on a background goiters(35 and 51 years) and one case of medullar carcinom with metastases in regional lymphonoduss (34). Among women in this group one case of low differentiated adenocarcinoma (77) and two cases of papillary microcarcinom (31 and 56), not recognized clinically.

4) 1 case (0,5% from an incurrence) of combination of follicle adenoma in the left stake with papillary carcinom in the right stake of thyroid for a man 38. The diagnosis of adenoma was clinically proposed. In operating material were also found out metastases in lymphonoduss.

Malignant tumors for men met in age 24-51, middle age of patients 34,7±10,7, 3 cases from 6 were on the short age-related interval 34-38. For women the age-related range is wider: 89 from 31 to, middle age 60,8±16,2, peak of morbidity 60-70.

Thus, tumors of thyroid in investigational material all ephithelial nature, prevail among them of high quality. On our material goiter for development of follicle adenoma served a background in 10,5 % cases. These data comport with data of other researchers [5]. The bulk of malignant tumors is diagnosed without preceding pathology (66,7 %), a key colloid goiter served in other supervisions a background. While researches of other authors demonstrate another

picture: without preceding changes in fabric of thyroid a cancer is diagnosed at 11,3 %[8]. Interestingly, that a papillary cancer for women is marked on the average in age 65,1±12,9, that goes away with data of other researchers that mark this form of chasse of thyroid in more young age [2].

Adenomas are clinically diagnosed in 22 cases from 42 (52,4%). From all cases, when there was a malignant tumor in a remote thyroid, and it is 25 supervisions, clinically a diagnosis was proposed only in 13 cases, that made 52%. It is necessary to mark that mainly it is related to objective reasons: microcarcinom on a background a key goiter; multidullar height of tumor; difficulties of cytologic verification of follicle and rare forms of chasse of thyroid; a presence of secondary circulator changes is in tumor knots. Intraoperative cytologic and histological research it would be allowed more exactly to put diagnosis and to determine a volume and character of operative interventions.

REFERENCES:

1) Gistologicheskaja harakteristika papilljarnogo raka shhitovidnoj zhelezy [Histological characteristics of papillary thyroid cancer] A.V. Argunov A.S. Trufanov V.B. Farafonov [i dr.] Sibirskij onkologicheskij zhurnal [Siberian Journal of Oncology]. 2006, № 3. - P. 84-85.

2) Diagnostika uzlovyh obrazovanij shhitovidnoj zhelezy s ispol'zovaniem sovremennyh metodov issledovanija [Diagnosis of thyroid nodules using modern methods of research] M. M. Abdulahimova V.V. Mit'kov V. O. Bondarenko [i dr.] Ul'trazvukovaja diagnostika [Ultrasound diagnosis]. 2002, № 2. - P. 7–15.

3) Zlokachestvennye novoobrazovanija shhitovidnoj zhelezy v Rossii (1889-2004 gg) [Malignant neoplasms of the thyroid gland in Russia (1889-2004 years)] G.V. Petrova V.V. Starinskij O.P. Grecova [i dr.] Sibirskij onkologicheskij zhurnal [Siberian Cancer zhurnal]. 2006, № 1.- P. 83-84.

4) Ob intraoperacionnyh gistologicheskom i citologicheskom issledovanijah shhitovidnoj zhelezy [On the intraoperative histological and cytological studies of the thyroid gland] V.A. Argunov A.S. Trufanov K.S. Loskutova [i dr.] Sibirskij onkologicheskij zhurnal [Siberian Cancer zhurnal]. 2006, № 3. – P. 83.

5) Pavlova T.V. Pavlov I.A. Kliniko-morfologicheskie aspekty raka shhitovidnoj zhelezy [Clinico-morphological aspects of thyroid cancer] Nauchnye vedomosti. Serija medicina. Farmacija [Scientific statements. Series medicine. Pharmacy]. 2011, № 4 (99), vypusk 13.- P.13-19.

6) Trudnosti morfologicheskoj verifikacii uzlovyh obrazovanij shhitovidnoj zhelezy [Difficulties morphological verification of thyroid nodules] O.S. Olifirova V.A. Beloborodov S.P. Shevchenko [i dr.] Vestnik Novosibirskogo gosudarstvennogo universiteta. Serija: Biologija, klinicheskaja medicina [Bulletin of the Novosibirsk State University. Series: biology, clinical medicine]. 2007, T. 5, № 1. – P. 26-30.

7) Follikuljarnaja adenoma shhitovidnoj zhelezy [Follicular thyroid adenoma] V.G. Petrov A.A. Nelaeva S.A. Jakimov [i dr.] Sibirskij onkologicheskij zhurnal [Siberian Journal of Oncology]. 2006, № 1. -P. 80-81.

8) Fonovaja patologija shhitovidnoj zhelezy kak prognosticheskij faktor zabolevaemosti rakom shhitovidnoj zhelezy [Background thyroid disease as a predictor of thyroid cancer] S.P. Shevchenko E.V. Karpinskaja S.V. Sidorov, [i dr.] Bjulleten' Sibirskogo otdelenija akademii medicinskih nauk [Bulletin of the Siberian Branch of the Academy of Medical Sciences]. 2011, T. 31, № 6. - P. 103-107.

AUTHORS:

1) Budnik Antonina Frantsevna - candidate of medical sciences, associate professor of the Department of normal and pathological anatomy, Medical faculty, KBSU. Ph.: +7 (906) 4858622, e-mail: budnik74@mail.ru Address: 360000, KBR, Nalchik, 3, I. Armande Str.

2) Musukayeva Anjelica Batalovna - assistant to the Department of normal and pathological anatomy, Medical faculty, KBSU. Ph. +7 (928) 7058767 e-mail: llaaa@mail.ru Address: 360000, KBR, Nalchik, 3, I. Armande Str.

3) Pshukova Elena Mukhadinovna, Candidate of Medical Sciences, assistant to the Department of normal and pathological anatomy, Medical faculty, KBSU. Ph. +7 (928) 0776361, e-mail: pshukova .71@mail.ru Address: 360000, KBR, Nalchik, 3, I. Armande Str.

4) Zakhokhov Ruslan Maksidovich, Candidate of Medical Sciences, associate professor, chair of the Department of general surgery, dean of medical faculty of KBSU. Ph.: +7 (903) 4254994, e-mail: zakh-rus@mail.ru Address: 360000, KBR, Nalchik, 3, I. Armande Str.