

Surgical Treatment of Thyroid Gland Our Experience of Three Years in DCVS



Healthcare

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Abstract

Although at the time of today thyroid gland surgery routinely develops, treatment of nodular and multinodular changes, neoplasms and some other forms of gland disorders even today it remains a challenge for the management medical team endocrinologist, surgeon, anesthesiologist who continued in basic agreement with each other make their successful treatment. Indications for surgical intervention in the thyroid gland are a comprehensible syndrome, suspicion for malignant tumor, hiperthyroidic struma, retrosternal struma and aesthetic purpose. Changes in the thyroid gland either organic or functional are common pathologies in our region. In our paper we present the 154 cases which are done in the Department of Clinical Vascular Surgery in three years period. As to the gender structure we had 140 women (90.9%) and 14 men (9.09%). The most affected age has been the fourth decade with 41 cases (26.62%) and the fifth of life with 62 cases (40.25%). Pathohistological results testified changes in the form of colloidal cysts in 46 cases (29.8%), nodular parenchymatous changes in 54 cases (35%) and diffuse parenkimatoze among which hipertireiodism in 32 cases (22.4%), Hashimoto thyroids in 10 cases (6.4%) and changes of different kinds of carcinomathosis in 12 cases (7.7%). Surgical treatment is applied so that extirpation of nodules / strumectomy in 22 cases (14.2%), loboisthmectomy in 68 cases (44.15%), subtotal thyroidectomia in 37 cases (24.02%) and total thyroidectomia in 27 cases (17.53%). One of the reasons for the presentation of the cases was that the opinion be known to contemporary surgical methods of treatment with full suggestion of conservative medical profiles. Fortunately we have the defense acquisition in collaboration with endocrinologist colleagues from the Internal Clinic of DCVS.

Introduction

Surgery of the thyroid gland has its origins back in ancient times. First notes for thyroid diseases were found written on papyrus in 2000 BC and the first notes for thyroidechothomy are from Abucasis in 925 BC. Since numerous complications were launched in 1791 a new era of operative treatment began to be applied in appropriate criteria. In 1909 the well known surgeon called Kocher by increasing the level of surgical treatment of the thyroid gland in science proficiency level won the Nobel prize (7). Among us, it is developed the tendency to establish of a multidisciplinary center.

Thyroid gland is located in the front of the neck and has the shape of a butterfly. It is the largest gland with internal secretion. This gland is responsible for producing hormones that regulate many processes in the body either mental or physical. Thyroid hormones T3 and T4 are produced by stimulating the pituitary gland which produces the hormone TSH tireostimulus (4.8).

Thyroid gland diseases are not rare entities. According to an analysis of the American Association of Clinical Endocrinologists it is said that about 30 million Americans have disorders of the thyroid gland secreting. Causes that affect the appearance of problems regarding the normal functioning of these glands are among the most different ones. They may be due to lack of iodine in food because of its deficit in designated areas, physical fatigue, psychological stress. But causes can also be the genetic defects, infections, side effects of drugs used for treatment of other diseases, etc.

Most affected by this pathology are women 3 to 4 times more than men, as well as the age groups from 35 to 50. In the routine cervical screening by ultrasonography HD to about 50 to 60% of examiners it can be found asymptomatic nodules. (6) Surgical treatment is different, depending on obstacles. Treatment consists of surgical thyroid nodules, with the removal of lobby with pathological changes, together with the isthmus as well as certain cases it is removed completely the thyroid gland. After this last one, the patient has to take a

substituting therapy for hormones for an entire life. Given the anatomy of the thyroid gland surgeon must be extremely careful to prevent any complication. Potential complications of major surgery involving the thyroid gland bleeding, nerve injury recurens, hypoparathyroidism, thyreotoxe fortune, upper laryngeal nerve damage and infection. (9).

Aim of the Study

Rating and evidencing several parameters of the diagnosed and treated patients in our unit in the period of 3 years. Presentation of the results of treatment by which we can expect stirring and appeal to the wide social opinion for the early diagnosis and treatment of disease. Extraction of fair and correct conclusions based on the concrete material, with theoretical and practical character associated with this pathology.

Material and Methods

Retrospective research is based on existing medical material of the Department of Clinical Vascular Surgery at the Clinical Centre in Pristina for the period of there years. It is used the descriptive method while the presentation has been done through tables. There were analyzed 154 cases and were treated surgically, there were analyzed groups by gender and by age. As a source data we used stories and records of the patients at the Department archive. According to the anamnesis data and HP results, we have analyzed different types of gland pathology as well as the surgical treatment mode.

Results

Table 1 shows the structure of patients by gender where it is seen that from a total of 154 patients, 140 (90.9%) were males and 14 (9:09%) were females.

Table 1. Structure of patients by gender (n = 154)

Sex	Number of patients	Percentage
Females	140	90.9
Males	14	9.09

In Table 2, where age groups are analyzed it can be seen that most of the patients were aged 41 to 50 with 62 cases (40.25%) respectively from 31 years of age to 50 years which reaches to 103 patients (66.87%)

Table 2. Structure of patients according to age (n = 154)

Age	Number of patients	Percentage
Up to 30	4	2.59%
From 31 to 40	41	26.62%
From 41 to 50	62	40.25%
From 51 to 60	18	11.68%
From 61 to 70	19	12.33%
Over 71	4	2.59%

Regarding postoperative histopathologic results we have the following results in only 46 patients (29.8%) the result was of colloidal cyst while nodular changes were found in 54 patients (35%) (Table 3).

Table 3. HP score (n = 154)

Results	Number of patients	Percentage
collodalis cyst	46	29.8%
solid nodular changes	54	35%
parenkimatoze diffuse changes	32	21.4%
Hashimoto Thyroid	12	7.7%
Malignant carcinomatose changes	10	6.4%

In table 4 we introduced the type of surgery, which our patients had been subjected to. From this we can conclude that Loboisthmectomy was the method of selecting the greater number of interventions and that of 66 cases (44.15%).

Table 4. Type of intervention (n = 154)

Type of intervention	Number of patients	Percentage
Strumectomy	22	14.2%
Loboisthmectomy	68	44.15%
Thyreoidectomy subtotalis	27	17.53%
Thyreoidectomy totalis	37	24.02%

Discussion

Once the first signs of pathological changes of the thyroid gland in most cases are obvious, even the diagnose of the disease is early enough. Diagnosis is made primarily with routine methods such as the anamnesis, hormonal laboratory analysis, echosonography of the thyroid gland, scintigraphy in contrast. In 1996 the American Association for the thyroid gland (ATA) has published a guide for module treatment. In the last decade there has been much advancement in the diagnosis and treatment of this pathology. There are also formed task forces, whose members are experts in this field who constantly deal with this issue based on different authors, entirely up to the final document that will be accepted as protocol by associations of the whole world (1). According to ATA about 20 million American suffer from illnesses of thyroid gland. The feminine gender mortality is five times higher than in males, which is consistent with our results. Even the author Vanderpup finds 4me 1 ratio in favor of females. To the analysis of these authors special nodular changes are 3 times expressed than that of diffuse ones, while in our analysis this difference is 2. (2). According to James Norman histopathological analysis to 95% indicates benign changes that matches with our results. (3) Based on the notes of all these studies we can draw some conclusions as well. Each nodus greater than 1cm either alone or associated with another nodus should be considered as potential for pathology and are often followed carefully. Patients after extirpation of nodules even if it is benign we should be continual monitoring. Because of the risk of malignization, all changes that have over 4 cm diameter and with positive familiar anemnesia should undergo total tiroidectomie. Regarding the complications that are caused in the cases presented by our work, we can say that they have been minimal. In only one occasion we had signs of bleeding and it has been necessary the revision. In three cases we had signs of hypocalcemia in first post-operation days, which are administered with Ca and vitamin D doses at least 10 days, but fortunately obstacles have had transitory nature. Although we had no intraoperative conditions for the recurrent nerves- neuromonitoring, we had no cases of nerve damage either periodic or superior laryngeus recurrent nerves.

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