

ATLAS INTERNATIONAL REFERRED JOURNAL ON SOCIAL SCIENCES

ISSN:2619-936X



Article Arrival Date: 18.05.2018

Published Date:27.07.2018

2018 / July

Vol 4, Issue:10

Pp:726-729

Disciplines: Areas of Social Studies Sciences (Economics and Administration, Tourism and Tourism Management, History, Culture, Religion, Psychology, Sociology, Fine Arts, Engineering, Architecture, Language, Literature, Educational Sciences, Pedagogy & Other Disciplines in Social Sciences)

THYROID SURGERY RESULTS: RETROSPECTIVE STUDY

TİROİD CERRAHİSİ SONUÇLARI: RETROSPEKTİF ÇALIŞMA

Ass. Prof.Dr. Bartu BADAK

Eskişehir Osmangazi University, drbartu@gmail.com, Eskişehir/Turkey

ABSTRACT

The thyroid gland, an important endocrine organ with functions, is composed of two lobes, approximately 20 g in weight, with right and left lobes merging with isthmus. It is located in front of the trachea where it is located and partially surrounds the trachea. Because of the close proximity to important nerves, vessels and organs, the indications, surgical techniques and complications of thyroid operations should be well known.

KeyWords: thyroid, surgery, complications

ÖZET

Fonksiyonları itibarı ile önemli bir endokrin organ olan tiroid bezi, yaklaşık 20 gr ağırlığında, isthmusla birleşen sağ ve sol lob olmak üzere iki lobdan oluşur. Bulunduğu yer itibariyle trakeanın hemen önünde yer alıp kısmen trakeayı çevreler. Önemli sinir, damar ve organlarla yakın komşulukları bulunduğundan tiroid operasyonlarının endikasyonları, cerrahi teknikleri ve komplikasyonları çok iyi bilinmelidir.

Anahtar kelimeler: tiroid, cerrahi, komplikasyon

1. INTRODUCTION

Indications for thyroidectomy include presence of goiter, presence or suspicion of thyroid malignancy, leading to pressure symptoms, retrosternal prolongation, cosmetic problems and medical treatment resistant hyperthyroidism (1).

Nodular or diffuse growth of the thyroid gland is called the goiter. Nodular goiter is seen in about 5% of the population (2). Surgery is performed frequently in this disease which is common in the society. In the United States, more than 50% of thyroid operations have been reported to have solitary nodule cases (3). Indications for thyroid surgery are accepted in the presence of nodular goitre (3) when the thyroid nodule is accompanied by vocal cord paresis or paralysis, the nodule is greater than 1 cm, the patient is male, the neck radiation story is less than 20 years old, . Hyperthyroidism is a thyrotoxicosis caused by the causes of the thyroid gland. The gland is formed by the fact that the hormones T3 and T4 are normally over-secreted. It often occurs with Graves' disease and toxic nodular goitre. Excessive thyroid hormone secretion from the thyroid gland may also occur when there is iodine-induced hyperthyroidism (Jod Basedow disease), TSH-releasing pituitary tumor, and hCG-secreting choriocarcinoma, depending on the drugs. Graves disease due to thyroidectomy and toxic noduler are among the options of treatable hyperthyroidism with goitre surgery (4-5-6).

In the postoperative period, complications such as hypocalcemia, hypoparathyroidism, vocal cord paralysis, infection, hemorrhage and hematoma may occur. Vocal cord paralysis is one of the most serious complications of injury to one or both of the recurrent laryngeal nerves (RLN) (7).

The purpose of this study is to retrospectively review the patients who underwent thyroid surgery in our Eskişehir Osmangazi University General Surgery Clinic and to discuss the patients based on preoperative, postoperative, and postoperative findings.

2. MATERIALS AND METHODS

A total of 104 patients who underwent thyroid surgery at Eskişehir Osmangazi University Medical Faculty General Surgery Clinic between January 2012 and October 2014 were included in this study. Hospital records were reviewed retrospectively, and preoperative information, surgery notes and follow-up visits were recorded. In the light of these records, the patients' age, gender, whether they have thyroid disease in their family history, pre-operative examinations were examined. The complications and follow-ups during and after the operation were compared and compared with literature data. In addition, the histopathological examination results of the patients' specimens were compared with preoperative examinations. SPSS software was used for statistical evaluation of the data. Statistical results were assessed by Chi-Square or Fisher's exact test. The p values for univariate analysis were determined. Multiple logistic regression tests were performed for the multivariate model. A P value of <0.05 was considered significant.

3. RESULTS

Of the 104 patients included in the study, 89 (85.6%) were female and 15 were male (14.4%). The mean age of the patients was 51.96 ± 13.57 . Bilaterally total thyroidectomy was performed in 72 patients, complementary total thyroidectomy in 1 patient, subtotal thyroidectomy in 1 patient and modified or radical neck dislocation in addition to bilaterally total thyroidectomy in 30 patients. In terms of postoperative complications, permanent hypoparathyroidism (2.8%) was associated with permanent hypocalcemia, transient hypocalcemia in 7 patients (6%), transient vocal cord paralysis in 2 patients (1.9%) and permanent vocal cord paralysis in 1 patient vocal cord paralysis, and 1 patient (0.9%) had recurrent hospitalization due to infection.

Thyroid malignancy was found in 75 (72.1%) patients and benign disease of thyroid was found in 29 (27.9%) patients when the operation specific pathologies of the patients were examined.

Thyroid Fine Needle Aspiration Biopsy (TIAAB) was available preoperatively in all 104 patients included in the study. When pathology results are examined; Malignancy was negative in 41 patients (39.4%). 42 patients (40.4%) were suspected and 21 patients (20.2%) were malignant. When the specimen pathologies were examined, 29 patients (27.9%) and 75 patients (72.1%) were malignant.

According to my study, patients who came as a result of TİİAB resultant suspects had an average of 5.25 times more likely to develop malignancy.

While the thyroid gland weighed 20 g on average; (\pm 60,61 gr) in the benign group and 32,70 gr (\pm 32,63 gr) in the malignant group when evaluated according to the results of specific pathology. In our study, the thyroid gland weight was found to be lighter in the benign group.

The mean follow-up period of the patients is 21.8 months (3-48 months), and follow-ups are continuing with the endocrinology clinic.

4. DISCUSSION

Thyroid surgery is a surgical procedure that is commonly performed by general surgery clinics all over the world. We designed this study to show the results of this important surgical procedure in our clinic.

Nodular goiter is more common in women than men in women. In the surgical series, there is a female gender superiority in the literature (8). We also had a woman who underwent surgery for nodular goiter in our study we found that the number of patients is higher than that of male patients.

The most important point in approach to the thyroid nodule is the benign-malign differentiation of the thyroid disease before the operation. The extent to which the tests performed for this purpose can make a correct diagnosis is still a controversial issue. USG is a useful method in determining the size, location, size growth of nodules and determining lymphadenopathies. However, the nodule has a limited place in benign-malign differentiation. Doppler USG nodules are reported to be useful in this distinction, especially by showing blood patterns of USG nodules. 11 Calcification in the nodule is an important finding of ultrasonography (9-10).

ATLAS INTERNATIONAL REFEREED JOURNAL ON SOCIAL SCIENCES

It is reported in the literature that more calcification is detected in malign nodules. However, calcification can also be detected in benign nodules. It has been reported that calcification may occur in 32-38% of benign nodules and 54-78% of malignancies in studies performed (11). However, it should be kept in mind that malignancy may also occur in patients without calcification. we think that subtotal surgeons should be avoided because of the high false negative rate.

In thyroid surgery, many methods have been described since the first application. These methods have changed from subtotal surgeons to total surgery. Subtotal surgeons advocated that the recurrent laryngeal nerve and parathyroid glands were less damaged and that postoperative morbidity was reduced with subtotal surgeons. Today, however, the accepted view is that if the technique is used, surgery is performed without leaving thyroid tissue and maximal protection of other anatomical structures and organs on the oped side. According to this, minimal thyroid surgery is the treatment of all thyroid tissue and isthmus removal of the tumor, ie, hemithyroidectomy.16 Total thyroidectomy is recommended for bilateral disease. This surgical approach is currently being applied with minimal morbidity. We share the same view clinically.

About 5% of thyroid nodules are malignant (12). Thyroid malignant masses are divided into two categories as good differentiation (papillary carcinoma, follicular carcinoma) and poor differentiation (medullary and anaplastic carcinoma), and treatments and prognosis and follow-ups are important differences in both groups. Similarly, the majority of our patients with malignancy were well differentiated carcinomas. In only 1 patient, sporadic type of medullary carcinoma was detected. The surgical procedures performed were performed in accordance with the surgical approaches recommended in the guidelines and all of our patients are in the follow-up period and the mortality due to the disease has not been determined yet.

The major complications that may be encountered in thyroid surgery include transient or permanent recurrent laryngeal nerve palsy, transient or permanent superficial laryngeal nerve palsy, transient or permanent hypoparathyroidism, bleeding, wound infection, seroma, thyroid storm, and incision(13). Gonçalves et al. (14) reported persistent hypoparathyroidism (2.5%), transient recurrent laryngeal nerve palsy (1.4%) and permanent recurrent laryngeal nerve palsy (0.4%), respectively, following the most frequent transient hypoparathyroidism (13.1%) in 1020 patient series. Visibility of our complications The rates are also in line with the literature.

As a result, thyroid surgery is important in terms of all complications. The surgeon who will apply this surgery is under the responsibility at every stage of the disease. For this reason, we think that it is important for the careful selection of patients in terms of surgery and for the surgeon to be carried out under accepted main rules.

REFERENCES

YEAR: 2018 VOL:4 ISSUE: 10

- 1.Shindo ML. Benign tiroid hastalıklarına giriş. Güngör A, Urhan M, çeviri editörleri (Terris DJ, Gourin CG, eds.). Tiroid ve Paratiroid Hastalıkları Tıbbi ve Cerrahi Tedavi. 1. Baskı. İstanbul: Habitat Yayıncılık; 2010. p.53-63. 3. Süslü N, Hoşal Ş. Tiroid nodülüne yaklaşım ve cerrahi endikasyonlar. Turkiye Klinikleri J Surg Med Sci 2007;3(49):5-12.)
- 2.Güney E. Tiroid neoplazmları. Güney E, editör. Tiroid ve Paratiroid Bez Cerrahi Hastalıkları. 1. Baskı. İstanbul: İyiişler Matbaacılık Ltd Şti.; 2008. p.93-104.
- 3.Hendrix R A. Diseases of the thyroid and parathyroid glands. Snow JB Jr, Ballenger JJ, editors. Ballenger's Otolaryngology, Head and Neck Surgery. 16th ed. Hamilton, Ontario: BC Decker Inc.; 2003. p. 1455-83
- 4.Nayak B, Hodak SP, Hyperthyrodism, Endocrinol Metab Clin N Am 2007; 36:617-56
- 5.Güllüoğlu BM, Sarı M, Boyun bölgesinin klinik değerlendirimi. In: Aydın S, Akça T, Çolak T (Eds). Cerrahi Hastalarda Tanı ve Fizik Muayene. Nobel Kitabevi . Adana, 2008: pp 59-78
- 6.Hegedüs L. Treatment of Graves hiperthyroidism: evidence based and emerging modalities. Endocrinol Metab Clin N Am 2009; 38: 355-71

ATLAS INTERNATIONAL REFEREED JOURNAL ON SOCIAL SCIENCES

- 7.Turhan AN, Öner OZ, Kütükçü E, Aygün E, Kalaycı M, Kapan S. Tiroidektomi ameliyatlarında rutin nervus rekürrens diseksiyonu yapılmalı mıdır? Bakırköy Tıp Dergisi 2005;1:102-4.
- 8.Çağlı S, Yüce İ, Bayram A, Güney E. Tiroid kitleleri: 131 olgunun değerlendirilmesi. Kulak Burun Bogaz Ihtis Derg 2008;18(5):289-293.)
- 9.Shindo ML. Benign tiroid hastalıklarına giriş. Güngör A, Urhan M, çeviri editörleri (Terris DJ, Gourin CG, eds.). Tiroid ve Paratiroid Hastalıkları Tıbbi ve Cerrahi Tedavi. 1. Baskı. İstanbul: Habitat Yayıncılık; 2010. p.53-63.
- 10. Güney E. Klinik gösteriler tiroid nodülü. Güney E, editör. Tiroid ve Paratiroid Bez Cerrahi Hastalıkları. 1. Baskı. İstanbul: İyiişler Matbaacılık Ltd Şti.; 2008. p.11-40.)
- 11. Süslü N, Hoşal Ş. Tiroid nodülüne yaklaşım ve cerrahi endikasyonlar. Turkiye Klinikleri J Surg Med Sci 2007;3(49):5-12.)
- 12.Lew JI, Snyder RA, Sanchez YM, Solorzano CC. Fine needle aspiration of the thyroid: correlation with final histopathology in a surgical series of 797 patients. J Am Coll Surg 2011; 213(1):188-94.
- 13. Tuncer Ü, Sürmelioğlu Ö. Tiroidektomi komplikasyonları ve tedavisi. Turkiye Klinikleri J Surg Med Sci 2007;3(49): 96-8.
- 14.Gonçalves Filho J, Kowalski LP. Surgical complications after thyroid surgery performed in a cancer hospital. Otolaryngol Head Neck Surg 2005;132(3):490-4.



YEAR: 2018 VOL:4 ISSUE: 10