Surgical management of thyroid gland swellings in 22 May Hospital, Aden, Yemen

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Abstract

Thyroid gland swellings are common clinical presentation of thyroid disorders of various etiologies, to which thyroidectomy is often carried out. The study aimed at analyzing demographic, clinical and pathologic features of patients with thyroid gland swellings, presented to 22 May Hospital and operated during the study period.as well as studying the types of operation used and their complications.

This is a retrospective study. All patients who presented to 22 May Hospital from 1st March 2018 to 28th February 2020 and operated were included in the study. Patients with cervical lymphadenopathy, retrosternal goiter, and extrathyroidal tumor invasion were excluded from the study. Relevant data were collected and processed. For statistical analysis, SPSS software vs.17 was used. The Freeman and Halton extension of Fischer exact test was completed using Vassarstat. P-value of ≤ 0.05 was considered statistically significant.

The study included 117 patients. Female preponderance was noted (91.5%). The average age group was 39.4 yrs, with SD \pm 13.8. Patients had an average duration of complain 50.3 months with SD \pm 67.8. Most patients were euthyroid (88.1%) and had no previous thyroid operation (94%). The overall cancer detection rate on histopathology exam was 12% and papillary thyroid cancer was the most frequent histopathologiccancer type (92.8%). Statistically significant difference was found in the cancer detection rate in the different forms of thyroid swellings, the highest rate was found in solitary thyroid nodule (33.3%). Incidental thyroid cancer was found in 2.5% of the research population, but the histopathologic examination of their completed thyroidectomy specimen showed no cancer remnant. The total thyroidectomy was the most frequently practiced thyroidectomy procedure (45.8% of operations). No statistically significant difference was found in the major complications of thyroidectomy procedures of different resection extent.

It could be concluded from this study that cancer detection rate in solitary thyroid nodule is significant, therefore, it needs to be carefully identified and investigated thoroughly.

Key words: solitary thyroid nodule, multinodular goiter, papillary thyroid cancer, thyroidectomy.

Introduction:

Thyroid gland is an endocrine gland located in the lower half of the anterior neck [10]. The diffuse or nodular enlargement of the gland is often called goiter. Thyroid nodule may represent a dominant nodule of multinodular goiter or may be a solitary nodule. Thyroid gland swellings may involve one lobe or have bilateral involvement. Thyroid gland swellings usually result from benign process, from malignant changes, or a process of unknown origin [12].

Thyroid surgery is the treatment of choice for malignant thyroid gland swellings as well as for benign swellings where medical treatment is ineffective or not practical [8]. Thyroidectomy is a common operation performed in surgical practice. It is considered safe in well equipped settings and in the hand of good expertise, however it may have perioperative/postoperative complications which may be life threatening. The reported rate of thyroidectomy complications varies but in range between 0.4% to 30% [14,28]. Thyroidectomy may results in specific complications which are peculiar for this type of operation, like recurrent laryngeal nerve injury and hypocalcaemia [18].

Post operative bleeding may occur and prone to develop tension hematoma which cause airway compression and may lead to asphyxia unless is evacuated [3].

There are several factors, apart from surgeons experience, that have been identified as risk factors for surgical complications, like operating on cancer, toxic hyperthyroidism, retrosternal goiter, lymph node dissection, and weight of the thyroid gland [5]. As well as completed thyroidectomy (revision thyroidectomy, redo thyroidectomy) is thought to carry a high risk of complications, including recurrent laryngeal nerve palsy and hypoparathyroidism. Previous thyroid surgery causes inflammation, edema and scarring which lead to loss of anatomical landmarks during the second operation [28].

There are several indications for thyroidectomy which include malignancy or clinical suspicion for malignancy, obstructive symptoms of goiter, hyperthyroidism and cosmetic issue [32].

Although thyroidectomy has been reported to be a well established surgical procedure, the approach and extent of tissue resection remain controversy. The extent and radicality of any surgical procedure should be weighed against its potential complications [13].

There are several surgical options for thyroidectomy, like total thyroidectomy, subtotal thyroidectomy, and hemithyroidectomy. During total thyroidectomy, both lobes and isthmus are completely removed leaving behind only viable parathyroid glands. whereas in subtotal thyroidectomy, most surgeons leave 2-3 grams of thyroid tissue on either side of the neck. Hemithyroidectomy refers to the complete removal of one lobe with the isthmus [15, 27].

In the recent years, there is a trend to shift function preserving surgery towards ablative surgery in, the surgical treatment of nonmalignant thyroid disease. Opponents towards this tendency argue that higher recurrence rate of goiter and increased risk of operative complications in reoperations after incomplete resection [25]. However, many surgeons avoid total thyroidectomy due to the high incidence of complications, such as permanent recurrent laryngeal nerve palsy, and permanent hypoparathyroidism, and subtotal thyroidectomy has been the preferred operation for benign thyroid disease [28].

Thyroid cancer is the most common endocrine malignancy and there has been steady increase in its incidence over the past 15- 20 years [39]. Incidental thyroid cancer is a malignancy undetected by preoperative imaging studies, but is identified by pathological examination of surgical specimen in patients treated for benign thyroid disease [24,29].

Fine needle aspiration cytology is an inexpensive, minimally invasive outpatient procedure that determines the malignancy risk in thyroid nodule. The mean false positive and false negative rates of FNAC are reported as less than 5% [38].

This study aimed at describing the demographic, clinical and pathologic features of patients with thyroid gland swelling, presented to 22 May Hospital and operated during the study period (described below). As well as studying the types of operation used and their complications.

Method:

This is a hospital based retrospective study. The study duration was 2 years. All patients who were presented with thyroid gland swelling (benign or malignant) and underwent thyroidectomy in 22 May Hospital- Aden from 1st March 2018to 28th February 2020, were included in the study. Patients with cervical lymphadenopathy, retrosternal goiter, and extrathyroidal tumor invasion were excluded from the study. Patients medical records, histopathology reports were revised, as well as the results of blood investigations, ultrasound findings and ENT consultation notes and anesthesiologist notes were checked. Demographic properties, preoperative clinical findings, and post operative findings and complications were evaluated and recorded to a prestructured questionnaire. After data were extracted, they was revised, coded and fed to statistical software IBM SPSS version 17. Categorical variables were expressed as counts and percentages, whereas continuous variables were expressed as means and standard deviation. The results were compared with other relevant studies in the literature. Also, univariate relations between form of neck

swelling and other clinical variables (like gender, duration of symptoms, mean age, histopathology results) were looked up. Also, relations between types of operation and complications were studied. For this purpose, Fischer's exact test was used to study univariate relations of categorical variables. For contingency tables 2×3 and 2×4 the Freeman and Halton extension of Fischer's exact test was used. (Calculated on Vassarstats statistical computation web site, http://vassarstats.net). P- value of ≤0.05 was considered statistically significant. For continuous variables, the one way ANOVA test was used to compare means, and, if found statistically significant, it was further tested by post hoc tests (Turkey's HSD) for multiple comparisons.

Results:

A total of 117 patients were included in this study comprising of 107 female (91.5%) and 10 males (8.5%). The females to males ratio was 10.7:1. The mean arithmetic age was 39.4, with standard deviation of 13.8. 75% of the patients were 50 years old or younger. The minimum age was 9 years and the maximum age was 100 years. Most patients came from upcountry, particularly from Lahej Governorate (37.6%). All the presented patients (117 cases) in the study had a chief complain of neck swelling and had an average duration of 50.3 months with a standard deviation of 67.8 month. The shortest duration of complain was one month and the longest 360 months. Most of the patients were euthyroid (103 cases 88.1%), 8 patients (6.8%) were hyperthyroid, and 6 patients (5.1%) were hypothyroid.(Further details illustrated in Table 1)

The majority of the patients in the study (110 patients, 94%) had no previous thyroid operation, while 7 patients (6%) had previous thyroid surgery. In 3 patients (2.5%) who had no previous thyroidectomy; incidental thyroid cancer was detected after the primary operation and they had a second operation (completion thyroidectomy) during the research period. Therefore, the total number of the thyroid operations in the study became 120.

Table 1. General characteristics of the patients (n=117)						
Variables:	No.	%				
Gender						
Male	10	8.5				
Female	107	91.5				
Origin						
Lahej	44	37.6				
Aden	34	29.1				
Dala'a	12	10.3				
Hudeida	12	10.3				
Taiz	8	6.8				
Abjan	3	2.6				
Shabwa	1	0.9				
Other	3	2.6				
Age						
Mean age (yrs) \pm SD	39.4 ± 13.8					
Minimum (yrs)	9					
Maximum (yrs)	100					
Percentile 25	29.0					
50	39.0					
75	50.0					
Symptom duration (months)						
Mean duration ± SD	50.36 ± 67.86					
Minimum	1					

Table 1. Genera	l characteristics	of the	patients	(n=117)
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Maximum	360	
Past history		
Thyroidectomy before study period	7	6
No history of thyroidectomy	110	94
Thyroid hormonal status		
Euthyroid	103	88.1
Hyperthyroid	8	6.8
Hypothyroid	6	5.1

On local physical examination of the neck, different forms of thyroid gland swelling were found, being the bilateral nodular enlargement which was the most frequently detected form in 50 patients (42.7%). The study revealed a statistically significant difference in cancer detection among the different physical forms of thyroid swellings who had not operated before (p- value = 0.012). Also, there was a statistically significant variance in the mean age of presentation of the different physical forms of thyroid swellings who had not operated before (p-value = 0.011) and on multiple comparison of the mean age of difference found only between diffuse form of neck swelling and multinodular form of neck swelling (p-value = 0.041).

Table 2: Univariate analysis of the difference or variance among the physical forms of thyroid swellings of patients who had no previous thyroid surgery*

Variables		Diffuse	Bilateral	Unilateral	Solitary	p-value	
			nodular				
Condon	Female	3	41	36	20	0.525**	
Gender	Male	1	5	3	1	0.525***	
Age in yrs (SD)		25.0 (3.5)	43.6 (1.5)	37.5 (2.3)	36.2 (3.2)	<0.011***	
Duration of sv	velling in	30.0 (11.5)	63.8 (9.9)	44.8 (11.8)	32.0 (9.9)	<0.255***	
months (SD)	-						
Cancer	Yes	0	2	4	7	0.012**	
	No	4	44	35	14	0.012***	

* n= 110, 7 patients with previous thyroidectomy were not illustrated in the table. **Calculated using Freeman-Halton extension of the Fisher's exact probability test. ***Calculated using one way ANOVA test.

The total thyroidectomy was the most frequently carried out operation (55 operation, 45.8% of total thyroidectomies). Further details are illustrated in Table 3.

 Table 3: Type of thyroid operation techniques used and their relative & cumulative frequencies:

Operation Type:	No. of cases	%*	%**
Primary thyroidectomy:			
Bilateral operation:			
Total thyroidectomy	55	45.8	45.8
Subtotal thyroidectomy	12	10	55.8
Unilateral operation:			
Lobectomy/hemithyroidectomy	43	35.8	91.6
Completion thyroidectomy	10	8.4	100
Total	120	100	

* relative frequency, ** cumulative frequency.

Table 4 compares the type of thyroidectomy selected in correspondence to the different clinical forms of neck swelling.

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Thyroid	TT	ST	HT	СТ	Total
swelling	No. (%)**				
Diffuse	2 (3.6)	2 (16.6)	0 (0)	0 (0)	4 (3.3)
Bilateral	37 (67.3)	9 (75)	0 (0)	0 (0)	46 (38.3)
nodular					
Unilateral	4 (7.3)	1 (8.3)	36 (85.7)	1 (10)*	42 (35)
Solitary	12 (21.8)	0 (0)	7 (16.3)	2 (20)*	21 (17.5)
Recurrent	0 (0)	0 (0)	0 (0)	7 (70)	7 (5.8)
Total	55 (100)	12 (100)	43 (100)	10 (100)	120 (100)

Table 4: Cross table illustration of the clinical forms of neck swellings against the types of
thyroid operation carried out.

* Two thyroid operations in the same patient. ** Percent calculated from total number of columns. Total number of operations = 120. TT: total thyroidectomy, ST: subtotal thyroidectomy, HT: hemithyroidectomy, CT: completion thyroidectomy.

Completion thyroidectomy was carried out in 10 patients. Seven patients of those had past history of nontotal thyroidectomy for benign thyroid swellings. They were presented with recurrent neck swelling. The new excision biopsy results revealed follicular carcinoma in one case and follicular adenoma in another case, and the remainder 5 cases had MNG. Another 3 patients, during the study period ,have underwent nontotal thyroidectomy (hemithyroidectomy) for benign thyroid lesion based on fine needle aspiration cytology and incidental cancer detected on histopathology examination (false negative FNAC rate was 2.56%). Revision operation has been done for them and the reexcised specimens were free from cancer on histopathology examination (Table 5).

In one patient, preoperative fine needle aspiration cytology reported malignant cell (papillary cancer), but no cancer was detected in the total thyroidectomy specimenby histopathology examination (false positive FNAC rate was 0.85%).

Table	Table 5. Completion myrodectomy, mulcations and instopatiology result.							
Indications for co	mpletion th	yroidectom	ıy	No. (%)	Histopathology result	No.(%)		
Recurrent swell	ling after	previous	thyroid	7 (70)				
surgery								
					MNG	5 (50)		
					Follicular adenoma	1 (10)		
					Follicular carcinoma	1 (10)		
Incidental thyroid cancer			3 (30)					
-					MNG	3 (30)		
Total				10 (100)		10 (100)		

Table 5:Completion thyroidectomy; indications and histopathology result.

NB. MNG: multinodular goiter

The most common benign lesion detected on histopathology was multinodular goiter (64 cases, 54.7%) and the most common malignant one was papillary thyroid cancer (13 cases, 11.1%). The overall cancer detection rate was 12% and noncancerous neoplastic lesions found in 12.85% of cases. However, neoplastic lesion detection rate among solitary thyroid nodule reached 52.3%. The results of histopathology in relation to the clinical forms of neck swellingsare further illustrated in Table 6.

	Clinical forms of neck swellings							
Histopathology	Diffuse	Bilateral	Unilateral	Solitary	Recurrent	Total		
	bilateral	nodular						
MNG	0 (0%)	36(78.2%)	17(40.4%)	7 (33.3%)	4 (57.1%)	64 (54.7%)		
Follicular adenoma	0 (0%)	2 (4.3%)	8 (19%)	3 (14.2%)	1 (14.2%)	14 (11.9%)		
Papillary Ca.	0 (0%)	2 (4.3%)	4 (9.5%)	7 (33.3%)	0 (0%)	13 (11.1%)		
Colloid cystic nodule	0 (0%)	0 (0%)	8 (19%)	1 (4.7%)	0 (0%)	9 (7.7%)		
Hashimoto Thyroiditis	0 (0%)	5 (10.8%)	0 (0%)	0 (0%)	1 (14.2%)	6 (5.1%)		
Hyperplastic thyroid	0 (0%)	1 (2.1%)	2 (4.7%)	2 (9.5%)	0 (0%)	5 (4.2%)		
nodule								
Graves disease	4 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (3.4%)		
Follicular Ca.	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (14.2%)	1 (0.8%)		
Borderline tumor	0 (0%)	0 (0%)	0 (0%)	1 (4.7%)	0 (0%)	1 (0.8%)		
Total	4 (100%)	46 (100%)	39 (100%)	21(100%)	7 (100%)	117 (100%)		

Table 6: Cross table illustration of histopathology results against clinical forms of thyroid
swellings.

NB. The second histopathology results for 3 patients who had incidental thyroid cancer and operated second time (completion thyroidectomy) are not included in the table.% : calculated from total of each column.MNG: multinodular goiter.

No statistically significant difference was found in the major complications (wound hematoma, postoperative hypocalcemia and recurrent laryngeal nerve injury) of thyroidectomy procedures of different resection extent. Also, no statistically significant difference was found in the major complicationsbetween primary thyroidectomy and completion thyroidectomy (Table 7 and 8).

Table 7: Complications of thyroidectomy procedures among patients operated for the first
time (primary thyroidectomy)

		1				
Complications		TT	ST	HT	Total	p- value
-		No. (%)	No. (%)	No. (%)	No. (%)	-
Hematoma	Yes	3	1	3	7	0.70*
	No	52	11	40	103	
Hypocalcemia	Yes	4	1	0	5	0.13*
	No	51	11	43	105	
RLN palsy	Yes	2	1	1	4	0.405*
	No	53	11	42	106	
Total: No. (%)						

N=110 (total number of primary thyroidectomy. * Calculated using the Freeman and Halton extension of the Fisher's exact probability test.RLN: recurrent laryngeal nerve.

Table 8: Analysis of the difference in major complications of primary thyroidectomy and completion thyroidectomy

completion try foldeetomy					
Complications		Primary	Completion	Total	p- value
-		Thyroidectomy	Thyroidectomy	No. (%)	-
		No. (%)	No. (%)		
Hematoma	Yes	7 (5.83)	2 (1.66)	9 (7.5)	0.164
	No	103 (85.83)	8 (6.66)	111 (92.5)	
Hypocalcemia	Yes	5 (4.16)	2 (1.66)	7 (5.83)	0.105
	No	105 (87.5)	8 (6.66)	113 (94.16)	
RLN palsy	Yes	4 (3.33)	1 (0.83)	5 (4.16)	0.35
	No	106 (88.33)	9 (7.5)	115 (95.83)	

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N= 120 (total number of thyroidectomy). RLN: recurrent laryngeal nerve. During the study period, no reported dead cases encountered.

Discussion:

The study revealed a distinct female preponderance over males with a ratio of 10.7:1. This observation shows similarity with previous studies that in Yemen by Alhuraibi K. et al [4], Al-Sharafi B et al [6], and Al-wageeh S et al [9], who described , in their studies, that females to males ratios were of 11.6:1, 10.2:1 and 9:1 respectively. However, other research papers recognize female preponderance of thyroid disease to a much lesser extent: 1.85:1- 2.31:1 [18,34]. The mean age of the current study was 39.4, with standard deviation, of 13.8. This value is compared well with studies from Yemen, Tanzania, KSA, and Sudan (mean age of 35.2, 40, 38.4, 43.7, and 43.9 respectively)[4,9,14,7,18]. whereas other studies showed higher figures (47.1, 48.4, 58.5) [31,34,36]. Most of the patients in this study came from rural areas located at a considerable distance from the hospital. This may explain the late presentation of many patients in the study. Similar findings were described by Al-wageeh S. et al [9], Alhuraibi K. et al [4], Chalya P.et al [14], and AfolabiA et al [2].

The majoriy of the patients in the study were euthyroid (88.1%) and this is similar to what mentioned by Al-SharafiB. et al [6] in their studies (87.6%). However, in the work of Al-HuraibiK.et al [4], euthyroid patients were slightly less frequent 80%. Hypothyroidism was found in 5.1% of cases. In comparison to other studies, the percentage of preoperative hypothyroidism showed similar proportions. For example, Afolabi A. et al [2] mentioned 4.3% hypothyroidism in their study population. Similarly Al-huraibi et al [4] as well as Sultan et al [35] found 5% of the patients hypothyroid, however, Olow M et al [28] from Magadishu reported hypothyroidism in 24% of the patients. In this study, hyperthyroidism constitutes only 6.8% of the operated patients. In some centers, hyperthyroidism were operatedmuch frequently. For example, PrabhakaranA. et al [31] from India, Al-huraibi K. et al [4] from Yemen, Guraya S et al from KSA [17], Sultan H. et al [15] from Egypt mentioned 11.2%, 15%, 17.6%, and 25% respectively.

Regarding the clinical description of thyroid gland swellings, the bilateral nodular form was most frequently identified (39.3%) in this study, followed by the unilateral swelling in 35.9%, solitary nodule 17.9% and diffuse swelling in 3.4%. This is in consistency with the clinical description of thyroid gland swellings by Al-Huraibi K et al [4], particularly the incidence of solitary thyroid nodule (17.4%), however, diffuse goiter represented 15.6% of their study sample.

Because of the primary goal in the management of thyroid, gland swellings is to differentiate malignant lesions from benign condition. The physical differentiation of thyroid swelling into different forms may have clinical significance. In this study, for example, the cancer detection rate was different among the different forms of thyroid swellings. In solitary thyroid nodule, the cancer detection rate was the highest and reached 33.3%, followed by recurrent thyroid swelling, unilateral swelling, and bilateral nodular swellings, and diffuse swelling (14.2%, 9.5%, 4.3% and 0% respectively). Similarly, Keh S et al [20] found cancer in 34% of the solitary thyroid nodules. Anitha S and Ravimohan TR [11] found the mean age of the incidence of solitary thyroid nodule 35 years. Their findings are in consistence with the present study (mean age of STN, 36.2 yrs)

The proportion of disease diagnosed after histopathology examination of the thyroidectomy specimens has shown similarities in many aspects with what published in some local and regional papers. Multinodular goiter was the most common thyroid pathology seen in this study. This finding is in agreement with many published papers found in the literature. The rate of follicular adenoma (11.9%) and thyroiditis (5.1%) detected in this study is close to the rate mention by Al-Huraibi K. et al [4] and Al-Wageeh S. et al [9] (follicular adenoma 11.8 % and 8.5%, thyroiditis 4%, 4.6% respectively). However, they found thyroid cancer more frequently (17.7%, and 21.1% respectively) than the current study (12%) [4,9]. Altaf S et al [8] in Karachi, Pakistan, found malignancy proven goiter in 23.2% of cases. Interestingly, Chayla P et al [14], in Tanzania, found the histopathologically proven thyroid malignancy, only in 7.9% of patients.

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In the present study, papillary carcinoma was the most common histopathological type of carcinoma (92.8%), followed by follicular carcinoma (7.2%). In a previous study by Abdulhamid G et al [1], utilizing the Abroad Treatment registry of Aden Health Office, found that thyroid cancer was the second most common malignancy in female and 57.8% of those who had thyroid cancer were papillary histopathological type, followed by follicular cancer 24.56%, anaplastic cancer in 10.5% and medullar cancer in 7%. Although many published studies in the world state that papillary cancer is the most common histopathological type of thyroid cancer, followed by follicular carcinoma, different trend may be noted in some areas. Chalya P et al [14] in northwest Tanzania, noticed that follicular carcinoma was the most common type. The reason behind this is probably the existence of long standing goiter in that region [14]. whereas Altaf S from Karachi [8], found medullary carcinoma in 9.9% of the cases, the second most common variant, preceded by papillary carcinoma in 83.1% and follicular carcinoma was found in 3 patients (2.56%), and all of them

were of papillary carcinoma type. Similarly, the incidence of incidental thyroid cancer found by Matoro et al [23] was 4.62% of total patients, 21.9% of the total number of cancer patients, and the histological type in all cases were papillary cancer.

In the current study, the total thyroidectomy was the most frequently practiced thyroidectomy (45.8%), whereas subtotal thyroidectomy used less often (10%). Contrary to what mentioned in a previous study in Yemen, where subtotal thyroidectomy was accounted for 51% of the thyroidectomies, whereas total thyroidectomy together, with near total thyroidectomy, reached only 8.6% [4]. This represents a shift in the management preference of local surgeons from less aggressive to more radical resection technique. This tendency is in consistency with many recent published papers [2,28,29]. The total thyroidectomy helps avoid reoperation and associated complications and nontotal thyroidectomy does not ensure the preservation of thyroid hormone function [22].

In the current study, no statistically significant difference was found in the rate of major complications (namely recurrent laryngeal nerve injury, post operativehypocalcemia and wound hematoma) associated with total thyroidectomy and that associated with nontotal thyroidectomy (subtotal thyroidectomy and hemithyroidectomy). Post operative hypocalcaemia is a common and most often transient event after extensive thyroid surgery [18,30,33], whereas other authors found that the rate of complications of the total thyroidectomy (namely RLN palsy, hypocalcaemia, hematoma) did not differ statistically significantly from that associated with subtotal thyroidectomy [16, 21]. However, Lin et al [22] found that the total thyroidectomy had significantly higher transient complication rate except for RLN palsy, however, statistically significant difference were not observed for permanent complications.

Recurrent goiter was found in 7 patients (5.9%) which is slightly higher than what was described by Altaf S et al [8] in Karachi (3.43%).

The subject of completion thyroidectomy had generated a considerable debate and controversy over many decades. The recurrence rate after nontotal thyroidectomy for benign goiters had varied from 5% to 40% among published series [22,37]. The surgical management of recurrent goiter is challenging, and the complication rate is increased, compared to initial surgery. There is an increased risk of RLN injury in recurrent goiter surgery [8]. The considerable higher complication rate of completion thyroidectomy is due to tissue scarring and fibrous adhesion [22]. In the current study, no statistically significant differences were found between primary and completion thyroidectomy, in the association with RLN palsy, hypocalcaemia and hematoma formation. This might be explained by that completion thyroidectomy was carried out preferentially by senior surgeons with long experience in thyroid surgery.

Conclusion:

Detection of thyroid cancer is an important aim in the management of thyroid gland swellings. Cancer detection rate in solitary thyroid nodule is significant, therefore it need to be carefully identified and investigated thoroughly.

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التدبير الجراحي لأورام الغدة الدرقية في مستشفى 22 مايو ، عدن ، اليمن

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الملخص

تُعد أورام الغدة الدرقية من الأعراض السريرية الشائعة لاعتلالات الغدة الدرقية الناجمة من عدة أمراض. و كثيرًا ما تجرى لها عملية استئصال الغدة الدرقية. هدفت الدراسة إلى التحليل الديموغرافي، السريري، والباثولوجي للمرضى المشمولين في الدراسة خلال فترة البحث. كذلك دراسة أنواع العمليات المستخدمةو مضاعفاتها.

هذه دراسة استيعاديه، وتشمل على المرضى الذين تقدموا إلى مستشفى 22 مايو من تاريخ 1 مارس 2018 إلى 28 فبراير 2020 و كان لديهم تورم في الغدة الدرقية وأجريت لهم عملية استئصال الغدة الدرقية. تم استقصى الحالات الذين كان لديهم اعتلال عقدي ليمفي للرقبة، تضخم الغدة الدرقية خلف القصي، أو غزو الورم خارج الغدة الدرقية. تم جمع و تحليل المعلومات وثيقة الصلة بالدراسة. استخدمت برنامج ال SPSS اصدار 17 في تحليل البيانات. استخدمت امتداد فريمان و هالتون لاختبار فيشر بواسطة واسرستات. واعتبرت قيمة 20.5 ≥ P-value

شملت الدراسة على 117 مريض إذ. كانت غالبيتهم من النساء (5.1%). كان متوسط العمر 39.4 سنة مع انحراف معياري 13.8. و كان متوسط مدة الشكوى المرضية 50.3 شهرا مع انحراف معياري 67.8. أغلب المرضى كانوا سويي الدرقية (8.1%)، ولم يُجر لهم من قبل عملية في الغدة الدرقية (40%). بشكل أغلب المرضى كانوا سويي الدرقية (8.1%)، ولم يُجر لهم من قبل عملية في الغدة الدرقية (40%). بشكل عام كان معدل اكتشاف السرطان من خلال فحص الانسجة 21% وكان سرطان الغدة الدرقية الحليمي اكثر انواع السرطان الغدة الدرقية الحليمي اكثر انواع السرطان المكتشفة بالفحص الأنسجة (8.2%). وقد وجد فرق ذو دلالة إحصائية في معدل اكتشاف السرطان الخدة الدرقية، حيث كان أعلى نسبة لدى العقيدة الوحيدة الدرقية الورية الورية الورعية العرضي السرطان بين مختلف أشكال الجثمانية للغدة الدرقية، حيث كان أعلى نسبة لدى العقيدة الوحيدة الدرقية العرضي على على بقاية سرطان الغدة الدرقية العرضي لدى 2.5% من مجتمع البحث، لكن فحص الانسجة لم يعثر على بقاية معلي أخرى المكتشفة بالفحص الأنسجة (2.5%)، وقد وجد فرق ذو دلالة إحصائية في معدل اكتشاف السرطان بين مختلف أشكال الجثمانية للغدة الدرقية، حيث كان أعلى نسبة لدى العقيدة الوحيدة الدرقية العرضي على على بقاية سرطان الغدة الدرقية العرضي لدى 2.5% من مجتمع البحث، لكن فحص الانسجة لم يعثر ألمى بقلي بقاية سرطان الغدة الدرقية العرضي لدى 2.5% من مجتمع البحث، لكن فحص الانسجة لم يعثر أكثر أنوع عمليات استئصال الغدة الدرقية العرضي لدى 4.5% من العدد الكلي للعمليات). لم يعثر الدراسة على بقاية مرطان في العينات استكمال الندة الدرقية. كان عملية استئصال الغدة الدرقية الملي على فرق ذو دلالة إحصائية في حدوث مضاعفات كبرى لدى الأنواع المختلفة من عمليات استئصال الغدة الدرقية. كان عملية المتئصال الغدة الدرقية الملي على فرق ذو دلالة إحصائية في حدوث مضاعفات كبرى لدى الأنواع المختلفة من عمليات). لم يعثر الدراسة على فرق ذو دلالة إحصائية في حدوث مضاعفات كبرى لدى الأنواع المختلفة من عمليات استئصال الغدة الدرقية.

تستخلص من هذه الدراسة بأنه معدل اكتشاف السرطان لدى العقيدة الوحيدة الدرقية معتد، لهذا يجب ا اكتشافها بحرص و فحصها مليًا.

الكلمات المفتاحية: العقيدة الوحيدة الدرقية، تضخم دراق عديد العقيدات، سرطان الغدة الدرقية الحليمي، استئصال الغدة الدرقية الكلي.