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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم

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التوثيق الالكتروني والميكرو فيلم

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CLINICOPATHOLOGICAL STUDY AND MANAGEMENT OF CANCER THYROID

THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF MD DEGREE
IN GENERAL SURGERY

By

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وَمَا كُنَّا لِنَهْتَدِيَ لَوْلَا
رَحْمَةُ اللَّهِ وَكَرَمُهُ

وَقُلْ رَبِّ زِدْنِي عِلْمًا

وَبِعِلْمِكَ الْيَوْمَ الْآخِرَ

مُطَهَّرًا لِلَّهِ الْعَظِيمِ
وَبِالْحَمْدِ لِلَّهِ الْعَظِيمِ

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INTRODUCTION

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Although thyroid cancer had been considered a relatively rare and indolent disease in the past, recent reports have documented a 50% increase in the incidence of the disease in white men and women who are 25 to 35 years of age; this increase is probably the result of irradiation – related thyroid disease. The incidence of thyroid cancer in females is 5.8 / 100000 but the incidence in males is only 2.4/100000 populations.⁽¹⁾

Thyroid neoplasms are the most common endocrine cancers accounting for 89% of endocrine malignancies and for 59% of death related to endocrine cancers.⁽²⁾

In Egypt, thyroid cancer constitutes 30% of endocrine malignancies and 12-49% of head and neck tumors. Most of these cases occurring in patients between 25 and 65 years of age but it can also occur in very young and the elderly.⁽³⁾

Due to the high long term survival of patients with well differentiated thyroid cancer and the indolent nature of most of these neoplasm, a lot of controversy about the proper management of the disease has existed. This depends on many factors, of which the most important is the pathological type and its expected natural history.⁽⁴⁾

Regardless the pathological type of the thyroid cancers, surgical resection remain the milestone for control of these tumors. ⁽⁵⁾ The traditional treatment of carcinoma of the thyroid gland generally consists of total thyroidectomy and central node dissection. On the other hand, more aggressive surgery is now practiced in advanced cases and in undifferentiated tumors, which were previously considered as candidates for tracheostomy followed by external irradiation and chemotherapy. ⁽⁶⁾

Modifications of the standard surgical treatment were developed with more understanding of the biological behavior of each pathological type. The choice of operation and adjuvant therapy depends up on many factors including the degree of differentiation and thus a more conservative view is now accepted in the well-differentiated tumors. ⁽⁷⁾

This work aimed to study the cases of thyroid cancer treated at Tanta university hospital over a period of 3 years duration, and to throw light up on the results of various lines of therapy adopted in the management of thyroid cancer, as well as the follow-up of patients as regards the recurrence rate, factors affecting the recurrence, disease free interval and survival.



REVIEW OF LITERATURE

ANATOMY

Embryology:

Near the end of the fourth month of embryological development, an endodermal diverticulum appear in the midline of the ventral pharyngeal surface, between the first and second pharyngeal pouches. This diverticulum becomes lobulated into two lobes which are connected to the site of pharyngeal origin by a hollow tube (thyroglossal duct) that passes just ventral to the developing hyoid bone. Thyroglossal duct had its pharyngeal attachment to the ventral pharyngeal floor at the site of the developing tongue. This connection can be identified in most adults as a permanent pit at the apex of sulcus terminalis in the dorsum of the tongue (foramen caecum). By the end of seventh week; the thyroid has assumed a concentric shape and comes to rest anterior to the developing trachea. Thyroglossal duct begins to atrophy and the thyroid sac is converted into a solid mass.⁽⁸⁾

Variation of this development results in an entirely lingual thyroid or persistence of thyroglossal duct remnants, which present as cysts. These cysts may lie anywhere from the base of the tongue to the suprasternal notch. The tract is intimately related to the body of the hyoid bone, which develops later and so any surgery for a thyroglossal duct remnant must remove a segment of the body of the hyoid bone. If this is

not done a very real risk of recurrence of the remnant exists and subsequent surgery becomes increasingly difficult and associated with morbidity such as persistent sinus or fistula. ⁽⁸⁾

Surgical anatomy:

The thyroid gland is a butterfly shaped structure with two lobes and an isthmus and in one third of cases a pyramidal lobe which represents the remnants of the thyroglossal duct may extend from the left side of the isthmus (in most of cases) up to the hyoid bone.

In the newborn, the thyroid weighs about 1.5gm, which gradually increase in weight to its adult weights of 25 gm (± 5).

The thyroid gland has a thin "True capsule" that intimately adheres to the gland and dips into it as a septa dividing the gland into lobules, each lobule contains 20-40 follicles that is supplied by its own individual artery, outside the true capsule is the surgical capsule which is composed of the middle and deep layers of the cervical fascia. ⁽⁹⁾

The surgical capsule "external to the true capsule" is prominent posteriorly where it condenses to connect the lobes of the thyroid glands on both sides to the cricoid cartilage and the first two tracheal rings, this is the thyroid pedicle or ligament of Berry which is actually a reflection