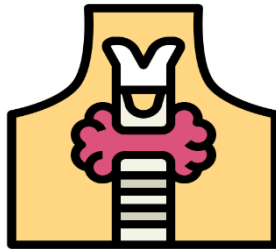




جامعة الإمام عبد الرحمن بن فيصل
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Thyroid Cancer



What are the causes of thyroid cancer?

Factors that may increase the risk of thyroid cancer include:

- Females (more likely than men to have thyroid tumors)



- Family history



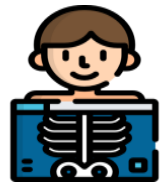
- Genetic syndromes



- Exposure to therapeutic radiation



- Exposure to nuclear radiation



What are the types of thyroid cancer?

recognizing the type of cancerous thyroid disease is important for determining treatment plans.

There are several types, including the following:

1. Papillary thyroid cancer:

It is the most common that may affect any age, but the most affected age groups are between 30-50 years, and it is the least severity and can be treated surgically.



2. Follicular thyroid cancer:

It mostly affects people over fifty years of age and it can be treated surgically.



What are the types of thyroid cancer?

3. Thyroid cancer (Hurthle cells):

It is a rare type of follicular thyroid cancer.



4. Medullary thyroid cancer:

It is considered one of the rare types of cancer and it causes an increase in the level of [calcitonin](#) in the blood and it is considered one of the indications of Cancerous tumors as it indicates the extent of the patient's response to treatment and it can be treated surgically.



What are the types of thyroid cancer?

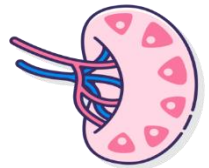
5. Anaplastic thyroid cancer:

This type is rare, fast-growing, and often affects the elderly, as it is considered one of the most aggressive cancerous tumors, and the condition is often advanced upon detection.



6. Thyroid cancer:

It is a rare type of thyroid cancer that starts from cells of the immune system, not cells of the thyroid gland.



What are the treatment methods for thyroid cancer?

The treatment plan is provided by the medical team according to the type and degree of thyroid cancer.

Options are as following:

First: Surgical Intervention



Thyroidectomy is the main treatment for thyroid cancer which is a surgery to remove the whole thyroid or one lobe besides removing the adjacent lymph nodes for the purpose of examination, diagnosis or treatment. Lymph nodes are also removed at other levels if it is proven that the cancerous tumor has spread to this level or to the lymph nodes, all of this is determined according to the following:

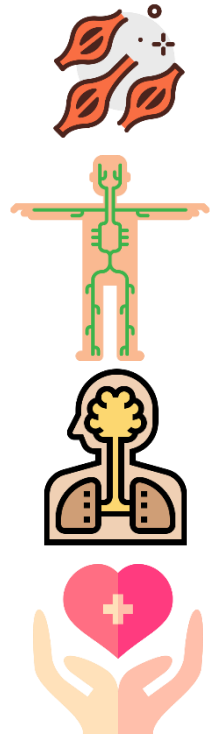
- Type of cancerous tumor
- Size of the tumor



What are the treatment methods for thyroid cancer?

First: Surgical Intervention

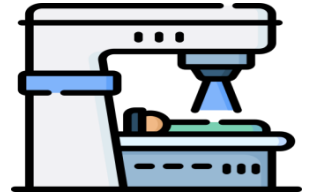
- The spread of the cancerous tumor to the surrounding tissues
- The spread of the cancerous tumor to the lymph nodes
- The spread of the cancerous tumor to other organs such as the lungs, the brain, and others
- The aim of the surgical procedure is curative or palliative



What are the treatment methods for thyroid cancer?

Second: Radioactive Iodine

Radioactive iodine scanning is performed by a diagnostic dose (a small dose of radioactive iodine) in the case of a



papillary or follicular tumor, as well as after thyroidectomy as this procedure aims to examine any remaining or widespread part of this type of cancerous tumor, then the next step is done either by another surgery or by using higher therapeutic doses to destroy these cancer cells.

What are the treatment methods for thyroid cancer?

Third: postoperative thyroid hormone alternatives:

Thyroid hormone tablets should be taken in order to replace the removed thyroid function, after blood tests are on a scheduled basis to determine the appropriate dose level, and the dose may be higher than the patient's need, according to what the treating medical team sees appropriate.



What are the treatment methods for thyroid cancer?

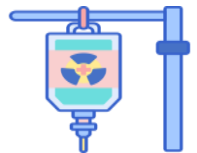
Fourth: Treatment by external radiation

This type of treatment is rarely used in cases of thyroid cancer, as it is used in some cases of raw thyroid cancer and some cases of advanced thyroid cancer of other types.



Fifthly: Chemotherapy

chemotherapy is rarely used for Thyroid cancer.



What are the main determinants of thyroidectomy complications?

There are many factors that may determine the complications of thyroidectomy, including:

1. Specialty of the surgeon

The doctor must be a specialist in this field, especially endocrine surgeon or neck and head wounds so that the patient gets the best results and the least complications.



2. The experience of the surgeon

This depends on the number of surgeries he performs annually.



What are the main determinants of thyroidectomy complications?

3. The type of tumor



4. Tumor extension



5. The type of surgical procedure.



6. If this surgical procedure of the thyroid gland has been followed by an earlier surgical procedure of the thyroid gland.



What are the main determinants of thyroidectomy complications?



Note:

The patient has the right to know the benefits of the surgical procedure and the potential complications of this procedure and it is preferable to know the potential complications of the same surgeon who will conduct the surgery so that the proportions are more accurate and clear to the patient.

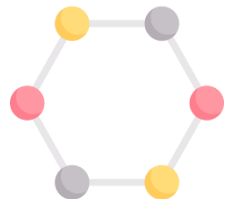
How to follow up with thyroid cancer patient after completing the treatment?

It is carried out through scheduled follow-up on a regular basis every 6-12 months, the medical history, examination and other necessary medical examinations are evaluated at each visit, including the following:

- Examination of thyroid hormone stimulator level and thyroid hormone level.



- Thyroglobulin level (for papillary and follicular thyroid cancer cases).



How to follow up with thyroid cancer patient after completing the treatment?

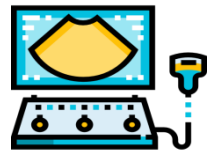
- Level of thyroglobulin antagonists (for papillary and follicular thyroid cancer cases).



- **Calcitonin** level (for medullary thyroid cancer cases).



- Perform a television x-ray examination of the neck.



- Conducting an imaging scan with radioactive iodine (for some cases of papillary or follicular cancer).



Sources and references:

All pictures used are from Flaticon.com and Freepik

Review and audit:

The content of this booklet has been reviewed by consultants of the
General Surgery department at King Fahad University Hospital

Health Awareness Unit

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