Thyroid Gland

Etiology and Staging

Etiology

Although there are not very many outside factors associated with thyroid cancer, there are still a few possible things that make a person more likely to develop a tumor.1

* Gender and Age
* Radiation
* Low Iodine in Diet
* Family History

Staging

American Joint Committee on Cancer Staging System for Thyroid Cancer.2

TNM

Primary Tumor (T)

TX – Primary tumor cannot be assessed.

T0 – There is no evidence of the primary tumor.

T1 – Tumor is 2cm or less in the greatest dimension.

T1a – Tumor is 1cm or less.

T1b – Tumor is more than 1cm but no greater than 2cm, and limited to the thyroid.

T2 – Tumor is more than 2cm but no more than 4cm in the greatest dimension, and also limited to the thyroid.

T3 – Tumor is more than 4cm in the greatest dimension but also limited to the thyroid.

T4a – Moderately advanced disease. Any tumor existing beyond the thyroid to invade other structures.

T4b – Very advanced disease. Any kind of tumor that invades vertebral bodies or vessels.

Regional Lymph Nodes (N)

NX – Regional lymph nodes that cannot be assessed.

N0 – No regional lymph node spread.

N1 – Regional lymph node spread.

N1a – Metastasis to level VI (pretracheal, paratracheal, and prelaryngeal lymph nodes)

N1b – Metastasis to unilateral, bilateral, or contralateral lymph nodes.

Distant Metastasis (M)

M0 – No distant metastasis present.

M1 – Distant metastasis.

Papillary or Follicular (Differentiated)

|  |  |  |  |
| --- | --- | --- | --- |
| Stage I | T1 | N0 | M0 |
| Stage II | T2 | N0 | M0 |
| Stage III | T3  T1-3 | N0  N1a | M0  M0 |
| Stage IVA | T4a  T4a  T1-3 | N0  N1a,b  N1b | M0  M0  M0 |
| Stage IVB | T4b | Any N | M0 |
| Stage IVC | Any T | Any N | M1 |

Medullary Carcinoma

|  |  |  |  |
| --- | --- | --- | --- |
| Stage I | T1 | N0 | M0 |
| Stage II | T2 or T3 | N0 | M0 |
| Stage III | T1-3 | Na | MO |
| Stage IVA | T4a  T4a  T1-3 | N0  N1a  N1b | M0  M0  M0 |
| Stage IIIB | T4b | Any N | M0 |
| Stage IVC | Ant T | Any N | M1 |

Anaplastic Carcinoma

|  |  |  |  |
| --- | --- | --- | --- |
| Stage IVA | T4a | Any N | M0 |
| Stage IVB | T4b | Any N | M0 |
| Stage IVC | Any T | Any N | M1 |

1. American Cancer Society. American Cancer Society Web Site. <http://www.cancer.org/cancer/thyroidcancer/detailedguide/thyroid-cancer-risk-factors>. Accessed June 3, 2013.
2. Chao, K, Perez, C, Brady, L. Radiation Oncology Management Decisions. 3rd ed. Philadelphia, PA: Lippincott Williams  & Wilkins; 2002.