Rx FOR SUCCESS

Thyroid Cancer

The incidence of thyroid cancer is increasing, probably due to increased detection and clinical awareness.

Subtypes

The types of thyroid cancer are papillary, papillary-follicular, follicular, medullary, and anaplastic. The long-term prognosis varies with the cell type and the stage:

Papillary is most common. Papillary, papillary-follicular, and follicular are considered "differentiated" and have a good prognosis, particularly at ages 20 to 40. Unfavorable pathological subtypes of thyroid cancer include tall cell, columnar, solid (trabecular), clear cell, and diffuse sclerosing.

Follicular cancer that is "widely invasive" (as opposed to "minimally invasive") through the capsule or showing vascular invasion tends to be more aggressive at presentation. Hurthle (oxyphilic) and insular cancer are more aggressive forms of follicular cancer.

Medullary cancer appears sporadically, as part of familial medullary cancer, or as part of multiple endocrine neoplasia (MEN) 2a and 2b. Stage I medullary cancer has a good prognosis while higher stages do not.

Anaplastic type of any thyroid cancer has a grave prognosis.

Staging

There are multiple staging systems for thyroid cancer, but TNM (tumor, nodes, metastasis) is preferred.

TNM Classification	Description (tumor size, node involvement, distant metastases)
T1	≤2cm
T2	2.1 – 4cm
T3	> 4 cm but limited to the thyroid or with minimal extra-thyroid extension into strap muscles
T3a	Tumor >4 cm limited to the thyroid
T3b	Tumor invading only strap muscles (sternohyoid, sternothyroid, thyrohyoid, or omohyoid muscles) from a tumor of any size
T4	Tumor of any size that extends beyond the capsule into subcutaneous soft tissues and nearby structures
T4a	Tumor involving subcutaneous soft tissues, larynx, trachea, esophagus, or recurrent laryngeal nerve from a tumor of any size
T4b	Tumor invading prevertebral fascia or encasing the carotid artery or mediastinal vessels from a tumor of any size
NX	Regional lymph nodes cannot be assessed
N0	No nodes in the region
N0a	One or more confirmed benign lymph nodes
N0b	No radiologic or clinical evidence of regional lymph node metastases
N1	Metastases to regional nodes
N1a	Nodes involved in pre-trachea, para-trachea, and pre-laryngeal regions
N1b	Nodes involved in cervical or superior mediastinal regions
M0	No distant metastases
M1	With distant metastases

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Staging for Papillary and Follicular Thyroid Cancer		
Stage	**Age at diagnosis <55**	**Age at diagnosis ≥55**
I	Any T, any N, M0	T1/T2, N0/NX, M0
II	Any T, any N, M1	T1N1M0; T2N1M0; T3, any N, M0
III	NA	T4a, any N, M0
IV-A	NA	T4b, any N, M0
IV-B	NA	Any T, any N, M1

Staging for Medullary Thyroid Cancer	
Stage	**All ages**
I	<2 cm T1, N0, M0
II	2-4 cm T1, N0, M0
III	>4 cm or N1 or microscopic invasion
IV	M1 (gross invasion)

Medullary cancer stage for all ages is the same as papillary age >45.

Anaplastic cancers are all considered Stage IV disease.

Treatment

Surgical excision (with or without node and neck exploration, depending on stage) followed by radioisotope (I^{131}) is typical. Stage I well differentiated tumors less than 1cm do not need radioiodine ablation; surgery is adequate for small tumors.

Surveillance

Surveillance after treatment includes lifetime followup with high resolution ultrasound, radioisotope (I^{123} or I^{131}) scan, and thyroglobulin (with or without stimulation) levels. One year after curative treatment (ablation or total thyroidectomy), thyroglobulin levels become undetectable. Calcitonin levels are checked in cases of medullary cancer. Serial testing is more valuable that one test.

Recurrences are common in thyroid cancer, but prognosis remains good in young patients (less than 55 years) with limited disease treated by additional surgery and/or radioisotope therapy (I^{131}).

Underwriting

- Completion of therapy is recovery from surgery and/or radioisotope treatment.
- Latest diagnostic radioisotope scan (I^{123} or I^{131}) is negative. A positive test suggests recurrent or residual tumor so would be postponed.
- Proposed insured is compliant with physician recommendations for on-going surveillance.

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Rating

Rating of thyroid cancer is based on the cell type, TNM classification, and age at diagnosis. Papillary thyroid cancer is the most common and has a good prognosis with low staging. Prognosis is worse with higher TNM classifications and in other types of thyroid cancers. Some very low risk papillary tumors (T1N0M0) may be accepted once treatment has been completed. For others, a longer postponement period and higher rating may be required.

Case examples of thyroid cancer in underwriting:

Client A – best case after complete thyroidectomy of a papillary thyroid cancer	Cancer is confined to the thyroid, less than 4 cm, without aggressive histology, completely excised and without lymph node involvement or distant metastases	No rating.
Client B – best case after complete thyroidectomy of medullary thyroid cancer	Client is less than 55 years of age at time of diagnosis, there is no lymph node involvement or metastatic disease	Postponement of 3 years then a temporary extra for the remainder of a 9 year duration.
Client C – best case of metastatic papillary thyroid cancer	Cancer involves tissues outside the thyroid gland, lymph nodes are involved, and has good endocrinology follow up.	Decline for 10 years, then standard.

To get an idea of how a client with a history of thyroid cancer would be viewed in the underwriting process, use the Ask "Rx"pert Underwriter on the next page for an informal quote.

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Ask "Rx"pert Underwriter (Ask Our Expert)

After reading the *Rx for Success* on Thyroid Cancer, please feel free to use this Ask "Rx"pert Underwriter for an informal quote.

Producer _____ Phone _____ Fax _____

Client _____ Age/DOB _____ Sex _____

If your client has had Thyroid Cancer, please answer the following:

1. What year was the initial diagnosis and when was the last occurrence?

_____

2. Please check the type(s):

☐ Papillary or Papillary/follicular ☐ Medullary ☐ Hurthle

☐ Follicular ☐ Anaplastic

3. What was the stage of the tumor?

_____

4. Have any of the following treatments been given?

Surgery ☐ Yes ☐ No. If yes, describe: _____

I^{131} treatment ☐ Yes ☐ No

Chemotherapy ☐ Yes ☐ No

External radiation treatment ☐ Yes ☐ No

Other: _____

5. Is there a history of metastatic disease?

☐ Yes. Please give details. _____

☐ No

6. Have additional studies been completed? (Check all that apply.)

☐ Radioisotope scans _____ (date)

☐ Ultrasound _____ (date)

☐ Thyroglobulin _____ (date)

☐ Calcitonin _____ (date)

7. Is your client on any medications?

☐ Yes. Please give details. _____

☐ No

8. Has your client smoked cigarettes in the last 12 months?

☐ Yes ☐ No

9. Does your client have any other major health problems (cancer, etc.)?

☐ Yes. Please give details. _____

☐ No