Thyroid Nodule Evaluation

INITIAL EVALUATION

Thyroid nodule found on palpation or imaging → Check serum TSH and consider referral to Endocrine Center at MD Anderson

TSH low?

Yes → Perform thyroid uptake scan → Hot nodule?

Yes → Ultrasound-guided FNA → See findings on Page 2

No → Neck ultrasound → FNA clinically indicated by ultrasound criteria?

Yes → Ultrasound-guided FNA → See findings on Page 2

No → See Benign pathway on Page 2

No → Consider referral to Endocrine Center at MD Anderson

Check serum TSH and consider referral to Endocrine Center at MD Anderson → FNA clinically indicated by ultrasound criteria?

Yes → Ultrasound-guided FNA → See findings on Page 2

No → See Benign pathway on Page 2

TSH = thyroid stimulating hormone
FNA = fine needle aspiration

1 Detection of abnormal lymph nodes should lead to FNA of the lymph node as well.
2 Reference the American Thyroid Association (ATA) guidelines

Note: Consider Clinical Trials as treatment options for eligible patients.

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers.
Surgery can be extended to total thyroidectomy for bilateral disease or high risk, which includes family history of thyroid cancer, radiation exposure, unilateral nodule greater than or equal to 4 cm, especially in men, or patient’s preference.

For patients who underwent lobectomy, Thyroid Function Tests (TFT) should be repeated at 4 to 8 weeks, 6 months and 12 months post-op to rule out hypothyroidism.

If repeat FNA is nondiagnostic, consider surgery or follow-up as benign pathology with risk factors.

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2 For patients who underwent lobectomy, Thyroid Function Tests (TFT) should be repeated at 4 to 8 weeks, 6 months and 12 months post-op to rule out hypothyroidism.

3 If repeat FNA is nondiagnostic, consider surgery or follow-up as benign pathology with risk factors.

4 Risk factors:
   - Family history of thyroid cancer
   - History of radiation exposure to the head/neck
   - Suspicious ultrasound features
   - Childhood cancer survivor
   - Familial adenomatous polyposis
   - Cowden syndrome


Thyroid Nodule Evaluation

This practice consensus algorithm is based on majority expert opinion of the Endocrine Center Faculty at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following endocrinologists, pathologists, surgical oncologists, radiologists, and nuclear medicine physicians.

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