

THYROID NODULES AND LABORATORY EVALUATION

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- **Thyroid nodules greater than 1 Cm**

- **Serum thyrotropin (TSH) should be measured during the initial evaluation of a patient with a thyroid nodule.**

- **If the serum TSH is subnormal, a radionuclide (preferably ¹²³I) thyroid scan should be performed**

Tg

- ▶ Routine measurement of serum thyroglobulin (Tg) for initial evaluation of thyroid nodules is **not recommended**.

(Strong recommendation, Moderate-quality evidence)

- ▶ Serum Tg levels can be elevated in most thyroid diseases and are **an insensitive and nonspecific test** for thyroid cancer.

Calcitonin

- ▶ At now cannot recommend **either for or against** routine measurement of serum **calcitonin** in patients with thyroid nodules.
- ▶ *(No recommendation, Insufficient evidence)*

- ▶ Pentagastrin stimulation testing to increase specificity
- ▶ Retrospective nature of the survival data
- ▶ Unresolved issues of assay performance
- ▶ Lack of availability of pentagastrin
- ▶ Potential biases in the cost-effective analysis
- ▶ ***Cannot recommend for or against the routine measurement of serum calcitonin as a screening test.***
- ▶ ***Not uniform agreement on this recommendation.***

2015 AMERICAN THYROID ASSOCIATION MANAGEMENT GUIDELINES FOR ADULT PATIENTS WITH THYROID NODULES AND DIFFERENTIATED THYROID CANCER

- ▶ **Serum calcitonin** may be considered in the subgroup of patients:
- ▶ In whom an elevated calcitonin may change the diagnostic or surgical approach:
- ▶ **Patients considered for less than total thyroidectomy .**
- ▶ **patients with suspicious cytology not consistent with PTC.**
- ▶ Unstimulated serum calcitonin determination : greater than **50–100pg/mL**
 A diagnosis of MTC is common
- ▶ *(No recommendation, Insufficient evidence)*

▶ Conclusion

- ▶ **TSH** measurement in thyroid nodules larger than 1 Cm is mandatory.
- ▶ **Calcitonin** measurement in individualized cases.
- ▶ **Tg** is a tumor marker mainly ;and has not any role in initial evaluation of thyroid nodules.

***Thanks For
Your
Attention***

