**INDICATIONS FOR TESTING**
Thyroid nodule identified as indeterminate, malignant, or suspicious for malignancy by FNA

**PERFORM**
Histologic analysis of resected nodule or core biopsy specimen

**CONSIDER**
Molecular testing (RECOMMENDED for indeterminate nodules)

**PTC**
Follicular thyroid cancer

**CONSIDER**
Testing for familial adenomatous polyposis in patients with cribriform-morular variant of PTC

**Hürthle cell cancer**

**Noninvasive follicular thyroid neoplasm with papillarylike nuclear features**

**Poorly differentiated thyroid cancer**

**Anaplastic thyroid cancer**

**MTC**

**ORDER**
Calcitonin

Calcitonin elevated

**REPEAT**
Calcitonin

Elevated calcitonin confirmed

**ORDER**
Calcitonin stimulation test

MTC confirmed

**ORDER**
RET germline genetic testing

Treatment with RET inhibitors planned

**ORDER**
Testing for somatic RET mutations

**CONSIDER**
Treatment

Surgical treatment planned

Evaluate for pheochromocytoma and hyperparathyroidism

Surgical treatment performed

**ORDER**
Calcitonin and Carcinoembryonic Antigen at least 4 times over 2 years

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**Abbreviations**
- CEA: Carcinoembryonic antigen
- FNA: Fine needle aspiration
- MTC: Medullary thyroid cancer
- PTC: Papillary thyroid cancer

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**References**

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*CEA is also expressed in MTC, but not in other primary thyroid cancers, so CEA testing may be useful if calcitonin-negative MTC is suspected. Results should be interpreted with care, as elevated CEA is associated with other malignancies, and coexisting CEA-expressing tumors and metastases should be ruled out, especially in cases of otherwise undetectable residual disease.*