

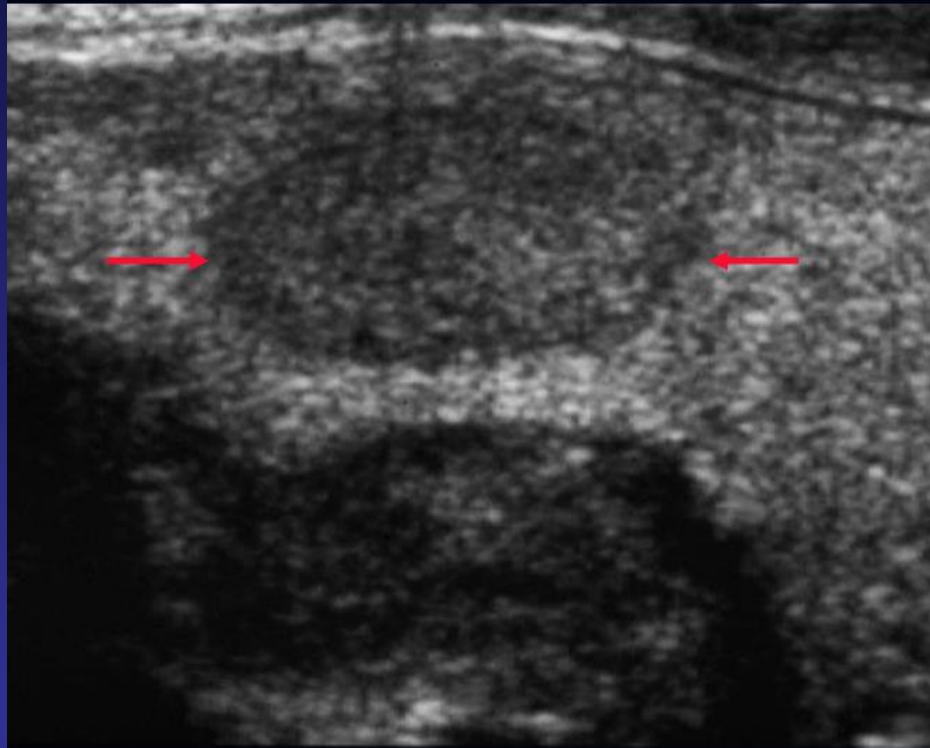
Primary Hyperparathyroidism

- Hypersecretion PTH > hypercalcemia
- Causes:
 - 85% 1-3 cm adenoma
 - 10% hyperplasia (increased in MEN)
 - 2%-4% multiple adenomas
- < 1% parathyroid carcinomas
- Treatment surgical excision

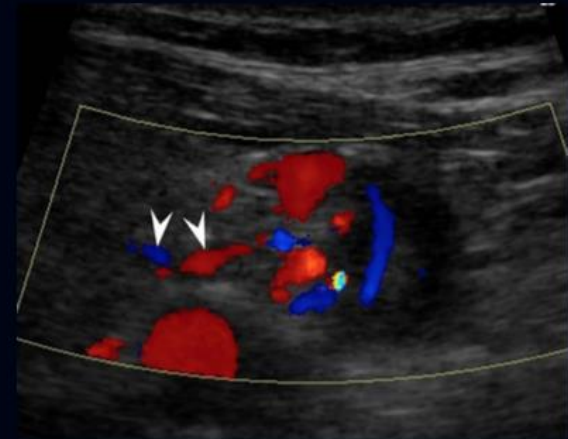
Adenoma

- Intrathyroid parathyroid adenomas are rare (2-5%), completely intrathyroid + echogenic edge with thyroid gland.
- Incidence of multiple PTAs is low [2-3%]
- Mimics lymph node: Circumscribed, soft tissue mass; early enhancement > > lymph node (30 seconds after injection)

Parathyroid adenoma

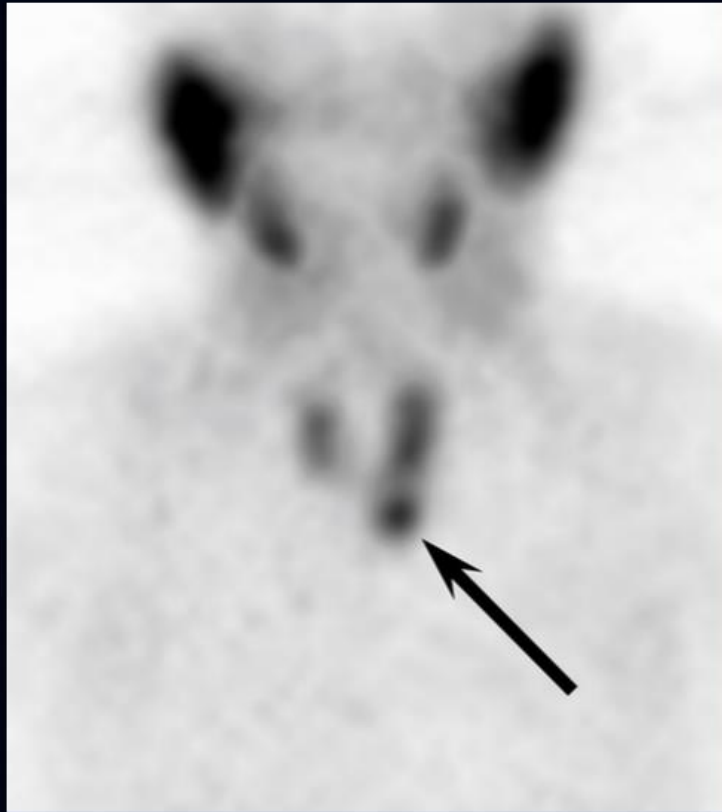


- 1) Demarcated
- 2) Solid
- 3) Hypoechoic
- 4) Homogeneous
- 5) Vascular

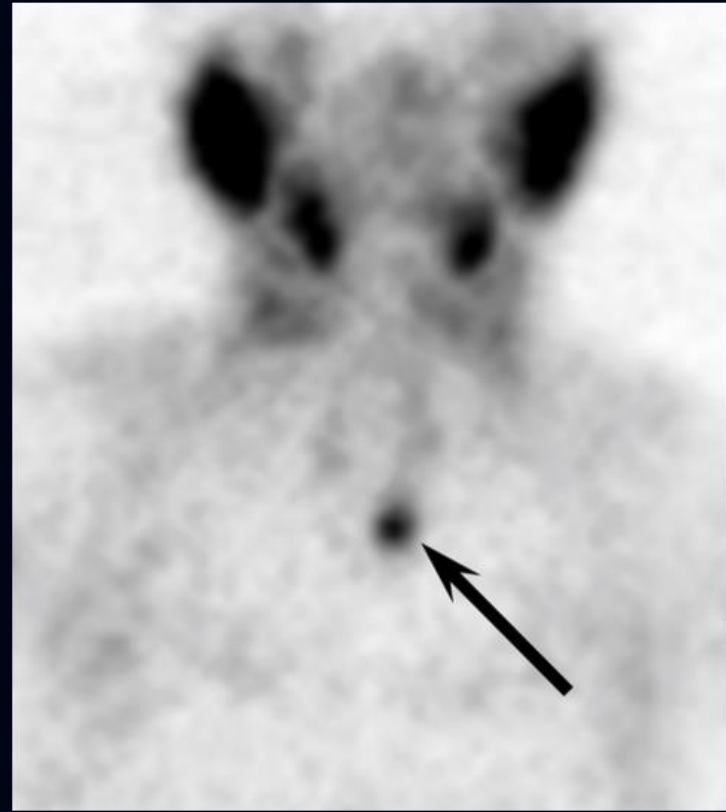


Peripheral arc and polar feeding

Sestamibi



15 minutes



Delayed 2 hrs

PITFALLS

- Adenoma with rapid washout
- Poor conspicuity of lesions near heart
- Very small adenomas - < 500 mg
- Thyroid lesions

MR or CT

- Surgeon wants anatomic information
- Negative US and NM
- Negative US and positive NM, (ectopic adenoma)
- Persistent hyperparathyroidism after neck exploration
- *Due Arterial phase, can be tall*

CT Adenoma

