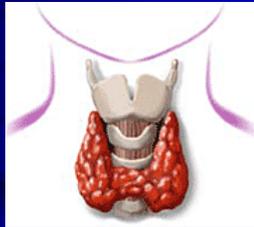


Thyroid, Thyroid and more Thyroid



A potpourri of pertinent,
prevalent and perhaps puzzling
presentations

30 year old female with a 4 cm thyroid cyst

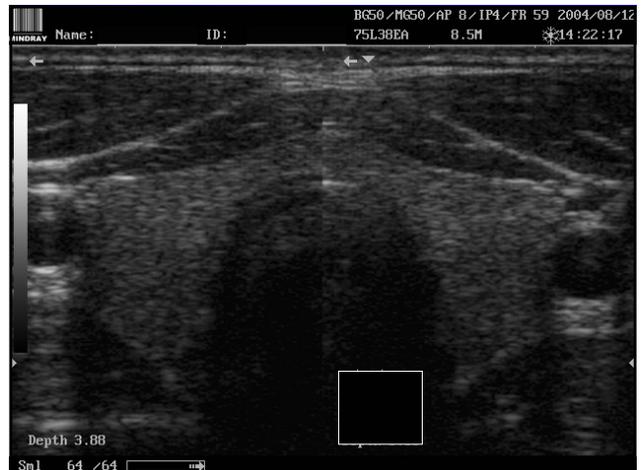
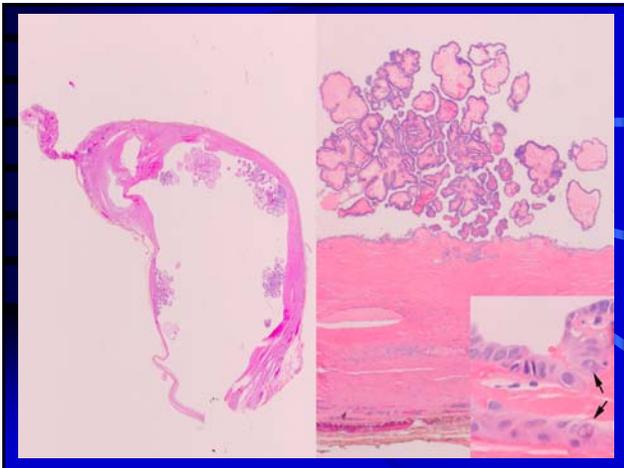
31yr old female with palpable enlarged left
thyroid

Ultrasound: multiple complex masses in left lobe, largest partially cystic, 2.5 cms

Nuclear medicine: large, cold areas in the left lobe

Left thyroid lobectomy:

Cystic papillary carcinoma



75 year old female complaining of dizziness

Carotid ultrasound:

“Within the right neck there is an approximately 1 cm nodule identified. This is removed from the thyroid and deep to it. The findings favor a parathyroid adenoma.....”

Serum calcium, ionized calcium, PTH all normal on 3 occasions

Thyroid ultrasound:

Normal sized left thyroid with a 3mm nodule
Enlarged right lobe with 3 nodules – 2.6 cms, 1.4 cms and 0.8 cms

Prevalence by Ultrasound

50% of the population will have one or more thyroid nodules seen on U/S.

Mazzaferri, NEJM 1993

Only 6% of 1 cm nodules are palpable

Only 50% of 1-2cm nodules are palpable

Even 50-60% of >2 cm nodules are not detected clinically

Brander et al, J Clin Ultrasound 1992

U/S identifies multiple nodules in 16%-48% of clinically solitary nodules

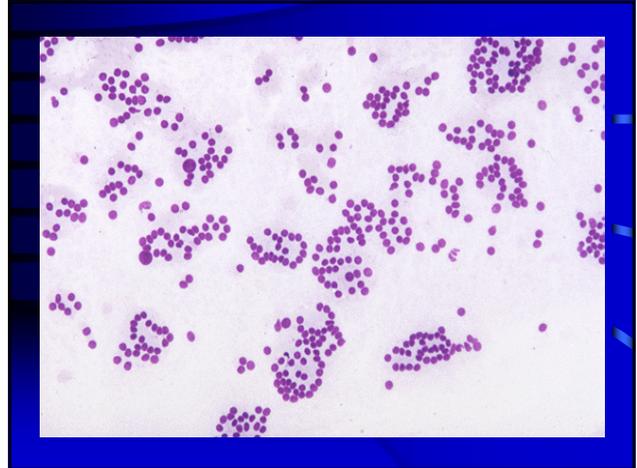
Tan et al, Ann Intern Med 1997

Brander et al, J Clin Ultrasound 1992

Walker et al, Br J Radiol 1985

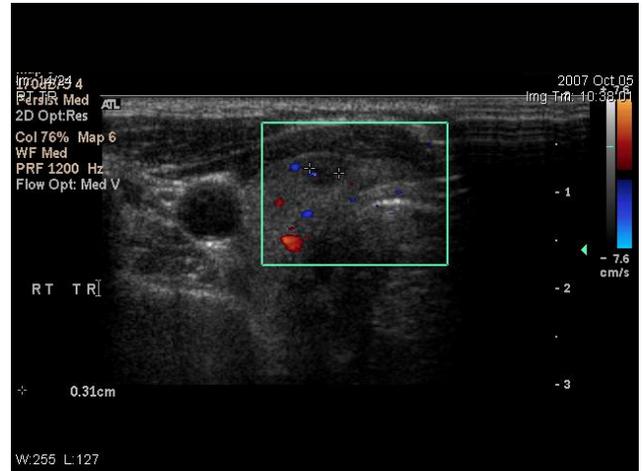
46 year old female has a palpable 3 cm left thyroid mass

Ultrasound: 3 cm left thyroid nodule with normal right lobe



Left thyroid lobectomy: Follicular adenoma and an incidental 5 mm papillary cancer, completely excised

10 years later, she had a repeat ultrasound showing a 3mm nodule in the right lobe of the thyroid and normal looking lymph nodes on both sides of the central neck



Thyroid Incidentaloma

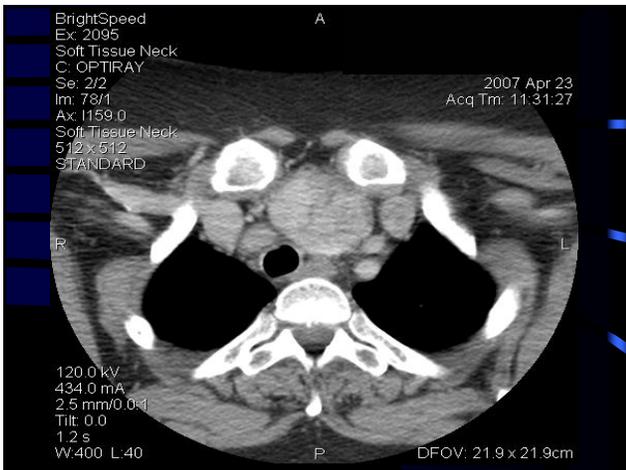
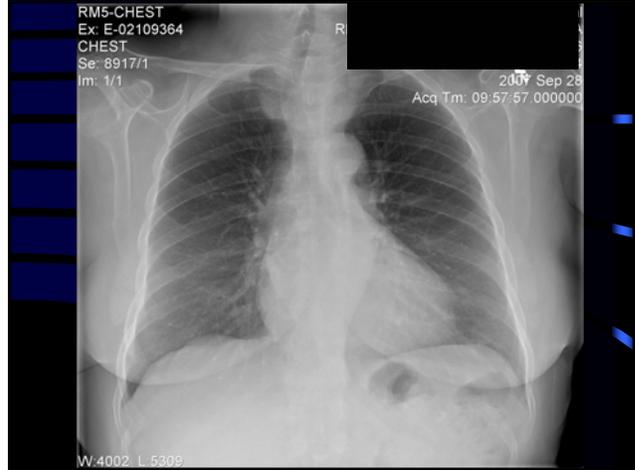
Ultrasound features of malignancy

- Hypoechoic
- Irregular
- Microcalcifications
- Intra nodular vascularity
- Incomplete halo



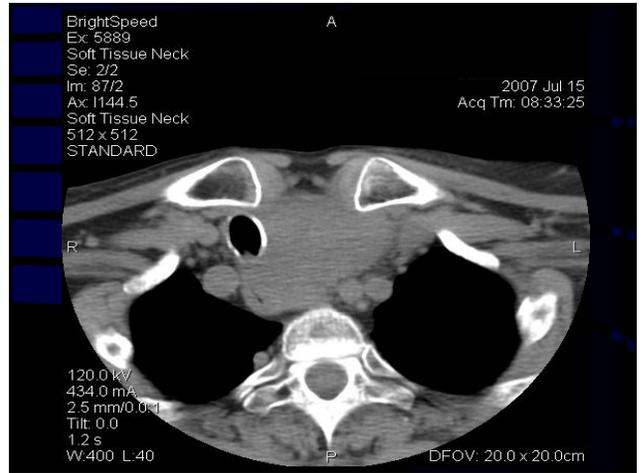
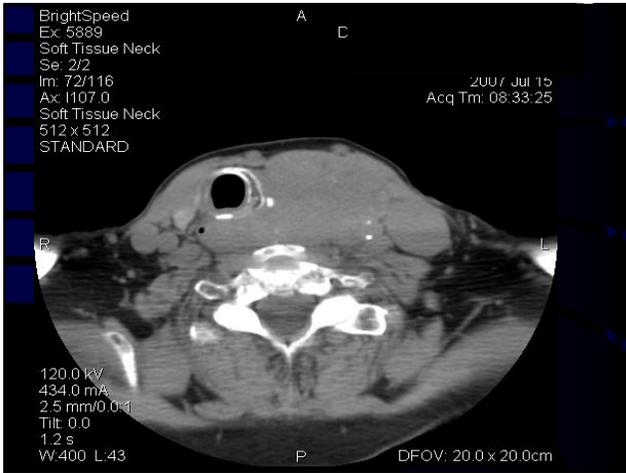
17 year old female with a 3 cm thyroid mass

FNAB: hyperplastic nodule vs follicular neoplasm

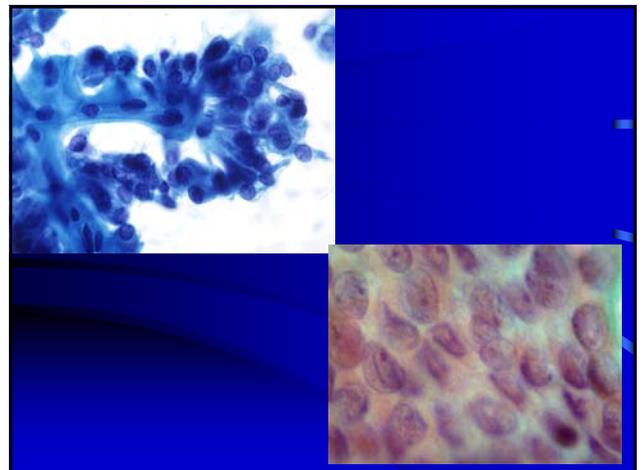


80 year old female with recent increase in a longstanding goitre, associated with dysphagia and voice change

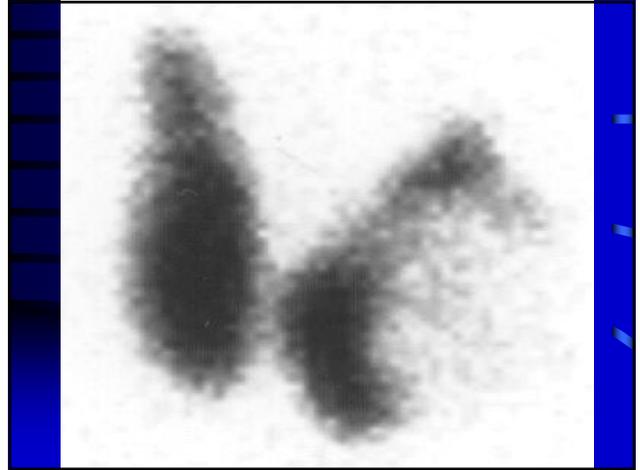
On exam, large, multinodular, mobile mass



60 year old man with a 1.5 cm right thyroid mass and FNAB evidence of papillary thyroid cancer

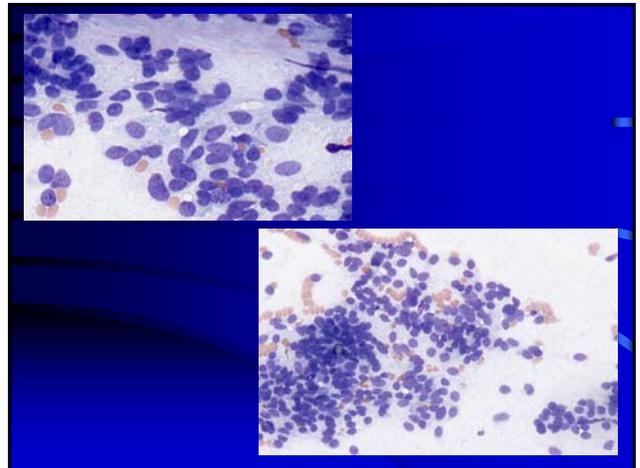


75 year old female had a doppler carotid study for possible TIA – 3 cm left thyroid nodule
On exam, well circumscribed, firm, mobile left thyroid mass with no other findings



FNAB review:

“...tumor has features consistent with medullary carcinoma...”





35 year old female with a 3 cm right thyroid mass that is asymptomatic and easily palpable

Mantle radiation at age 17 for Hodgkin's disease

