

THYROID ULTRASOUND

SELF-CORRECT ONLY

PATIENT NAME: _____ MR#: _____
DATE: _____ TECH: _____ EXT#: _____
FACILITY: MWH / MIF / ICW / MILH / MINS / MIKG / MIHC / MIEM / SH

INDICATION: ☐ Enlarged thyroid on physical exam ☐ Abnormal TFTs ☐ Thyroid nodules
☐ Abnormal radiological finding ☐ Hyperparathyroidism ☐ Parathyroid adenoma ☐ Other: _____

COMPARISON: ☐ None ☐ _____

TECHNIQUE: Grayscale and color duplex sonography of the thyroid performed. ☐ Imaging of the parathyroid regions was performed as well.

FINDINGS (select appropriate):

The echotexture pattern of the thyroid is (subjectively):

- ☐ Homogeneous.
☐ (Mildly / Moderately / Markedly) heterogeneous throughout.
☐ Hypoechoic with prominence of the echogenic fibrous septations throughout.

RIGHT LOBE: Size (cm): Length _____ AP _____ Width _____ Volume: _____ ml.

LEFT LOBE: Size (cm): Length _____ AP _____ Width _____ Volume: _____ ml.

ISTHMUS: Size (cm): AP _____ *THYROID VOLUME CALCULATION (L x W x H x 0.52).

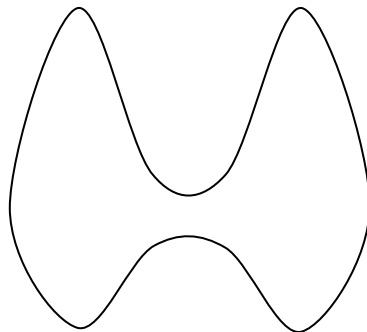
REFERENCE RANGES: NORMAL IS 19.6 ML +/- 4.7 ML FOR MALES AND 17.5 ML +/- 4.2 ML FOR FEMALES

Gland vascularity on color Doppler imaging is subjectively: ☐ within normal limits. ☐ increased.

THYROID NODULES/MASSES:

- ☐ No discrete nodules are identified.
☐ Discrete thyroid nodule(s) are identified. As per TI-RADS, no more than 4 nodules (most suspicious) will be documented.

RIGHT LOBE
NODULE: LONG x WIDTH x AP IMG#
1. _____ x _____ x _____ cm _____
2. _____ x _____ x _____ cm _____
3. _____ x _____ x _____ cm _____
4. _____ x _____ x _____ cm _____
5. _____ x _____ x _____ cm _____



LEFT LOBE
NODULE: LONG x WIDTH x AP IMG#
1. _____ x _____ x _____ cm _____
2. _____ x _____ x _____ cm _____
3. _____ x _____ x _____ cm _____
4. _____ x _____ x _____ cm _____
5. _____ x _____ x _____ cm _____

Isthmus
NODULE: LONG x WIDTH x AP IMG#
1. _____ x _____ x _____ cm _____
2. _____ x _____ x _____ cm _____
3. _____ x _____ x _____ cm _____

IMPRESSION: Preliminary findings/impression subject to radiologist review.

- ☐ Thyroid ultrasound within normal limits.
☐ Nodular Thyroid gland (Radiologist to dictate)

ACR TI-RADS

COMPOSITION
(Choose 1)

Cystic or almost completely cystic	0 points
Spongiform	0 points
Mixed cystic and solid	1 point
Solid or almost completely solid	2 points

ECHOGENICITY
(Choose 1)

Anechoic	0 points
Hyperechoic or isoechoic	1 point
Hypoechoic	2 points
Very hypoechoic	3 points

SHAPE
(Choose 1)

Wider-than-tall	0 points
Taller-than-wide	3 points

MARGIN
(Choose 1)

Smooth	0 points
Ill-defined	0 points
Lobulated or irregular	2 points
Extra-thyroidal extension	3 points

ECHOGENIC FOCI
(Choose All That Apply)

None or large comet-tail artifacts	0 points
Macrocalcifications	1 point
Peripheral (rim) calcifications	2 points
Punctate echogenic foci	3 points

Add Points From All Categories to Determine TI-RADS Level

0 Points

TR1
Benign
No FNA

2 Points

TR2
Not Suspicious
No FNA

3 Points

TR3
Mildly Suspicious
FNA if ≥ 2.5 cm
Follow if ≥ 1.5 cm

4 to 6 Points

TR4
Moderately Suspicious
FNA if ≥ 1.5 cm
Follow if ≥ 1 cm

7 Points or More

TR5
Highly Suspicious
FNA if ≥ 1 cm
Follow if ≥ 0.5 cm*

COMPOSITION	ECHOGENICITY	SHAPE	MARGIN	ECHOGENIC FOCI
<p>Spongiform: Composed predominantly (>50%) of small cystic spaces. Do not add further points for other categories.</p> <p>Mixed cystic and solid: Assign points for predominant solid component.</p> <p>Assign 2 points if composition cannot be determined because of calcification.</p>	<p>Anechoic: Applies to cystic or almost completely cystic nodules.</p> <p>Hyperechoic/isoechoic/hypoechoic: Compared to adjacent parenchyma.</p> <p>Very hypoechoic: More hypoechoic than strap muscles.</p> <p>Assign 1 point if echogenicity cannot be determined.</p>	<p>Taller-than-wide: Should be assessed on a transverse image with measurements parallel to sound beam for height and perpendicular to sound beam for width. This can usually be assessed by visual inspection.</p>	<p>Lobulated: Protrusions into adjacent tissue.</p> <p>Irregular: Jagged, spiculated, or sharp angles.</p> <p>Extrathyroidal extension: Obvious invasion = malignancy.</p> <p>Assign 0 points if margin cannot be determined.</p>	<p>Large comet-tail artifacts: V-shaped, >1 mm, in cystic components.</p> <p>Macrocalcifications: Cause acoustic shadowing.</p> <p>Peripheral: Complete or incomplete along margin.</p> <p>Punctate echogenic foci: May have small comet-tail artifacts.</p>

*Refer to discussion of papillary microcarcinomas for 5-9 mm TR5 nodules.