Radiology Report
04/21/2007

Thyroid Sonogram

Clinical Indication: Bilateral thyroid nodules

Sonography of the thyroid gland is performed.

There is a large complex partially cystic and partially solid nodule in the right thyroid lobe measuring 3.9 x 2.5 x 2.4 cm in diameter. This fills the majority of the right thyroid lobe. On the left, there is a 1.5 x 1.1 x 1 cm nodule near the inferior pole, which is slightly heterogeneous in echogenicity but appears to be nearly entirely solid. The thyroid gland otherwise appears unremarkable.

Bilateral thyroid nodules, with an approximately 1.5 cm solid left thyroid nodule and an approximately 3.9 cm complex cystic and solid nodule on the right. Both would be amenable to percutaneous fine needle aspirate biopsy.

History & Physical
05/08/2007

Chief Complaint: Thyroid masses

History of Present Illness: Patient is a 30-year-old female with a known history of thyroid nodules. She has had a right thyroid complex cyst drained at least three times. She also has a known solid mass in her left node which has been biopsied. This revealed rare Hurthle cells. Recent repeat sonogram shows continued presence of a 1.5 centimeter mass in the left thyroid. It also reveals that the right thyroid seems to have been completely replaced by a complex mass measuring 3.9 centimeters in diameter.

Past Medical History: Medial illnesses none

Past Surgical History: None

Allergies: No known drug allergies

Current Medications: None

Family History: Noncontributory

Social History: She rarely consumes alcohol

Review of Systems: As above

Physical Examination:
HEENT: Unremarkable
Neck: She has bilateral thyroid enlargement. The right is greater than the left. No nodes are palpable.
Heart: Regular rhythm
Lungs: Clear
Back: Benign
Extremities: Normal
Neurologic: Exam normal

Impression: Thyroid nodules

Plan: Thyroidectomy. The risks including infection, hemorrhage, hoarseness, fatigue and hypocalcemia were explained to the patient who expressed understanding and agrees to proceed.

Endocrinology Consultation
05/08/2007

This patient is admitted for thyroidectomy.

The patient is a very nice 30-year-old female with a long-standing history of a goiter, a thyroid nodule found by her primary physician during annual checkup. We initially saw her in March of 2007. By this time she had had two previous biopsies, one in January of 2007 and one in December of 2006, neither one was diagnostic. She had a follow-up biopsy by me. The solid nodule on the left was nodular hyperplasia. The left, which was cystic solid with significant amount of fluid, was nondiagnostic. Because of three biopsies that had been the latter, she was referred to General Surgeon, who agreed that she would be a candidate for surgery. Follow-up sonogram showed that the right side nodule/cyst had increased in size to 3.9 cm. The dominant nodule on the left at 1.5 cm was unchanged. The patient was agreeable to having surgery. Thyroid function studies have been normal.

Past History: Otherwise unremarkable. There is no history of head or neck radiation. Her mother did have Hashimoto's thyroiditis and had two-thirds of her thyroid removed at age 25. Two years ago a maternal cousin had thyroid cancer.

Social History: One brother and two sisters, she is the second. Mother taught preschool and is now a housewife. Father is in commercial artworks, works for the Caterpillar Company. The patient has a Bachelor's in English and writing. She is not married. She is single. She does not smoke or drink alcohol. She takes no medications.

Physical Examination: Well-developed, well-nourished female in no distress.
Vital Signs: BP: 128/80. R: 16. P: 80.
HEENT: Extraocular movements are full. Oropharynx is clear.
Neck: Thyroid is enlarged, right more than left. The right side is somewhat firm. Nodules palpable on the left.
Lungs: Clear
Heart: Regular rhythm
Extremities: Reflexes normal

The patient will undergo a thyroidectomy. We will follow calcium levels closely and await pathology report. If malignant, future treatment may include radioisotope and/or hormone replacement, dependant on pathology findings.

Operative Report
05/08/2007

Preoperative Diagnosis: Bilateral thyroid nodules

Postoperative Diagnosis: Pending pathology

Procedure: Thyroidectomy

Findings: With the patient under satisfactory general anesthesia, the anterior neck was prepped and draped in a sterile fashion. Using a scalpel, a collar incision was made in the skin line and underlying tissues divided using cautery. Subplatysmal flaps were raised superiorly and inferiorly. The strap muscles were separated in the midline.

Attention was directed to the right side. Strap muscles were carefully dissected free from the right thyroid. The right thyroid was mobilized. The middle thyroid vein was divided using the Ligasure. Cerebral vessels were ligated using Ligasure as were the inferior pole vessels. The right recurrent nerve was identified. Both parathyroids were identified. The thyroid was dissected to the midline. There was a small firm lobe, which was freed from the surrounding tissues using Ligasure. Attention was directed to the left side. The strap muscles were carefully mobilized away from the left thyroid gland. The superior pole vessels were divided using Ligasure as were the inferior pole vessels. The left recurrent nerve was identified. What was believed to be parathyroid tissue was identified both superiorly and inferiorly. The thyroid was then dissected from the trachea. The area was inspected, and there appeared to be satisfactory hemostasis. Both nerves were again visualized. The strap muscles were reapproximated with a running suture of 3-0 Vicryl. The platysma was reapproximated with interrupted sutures of 3-0 Vicryl, and the skin was closed with a running intracuticular stitch of 5-0 Vicryl. Steri-Strips were applied. The needle, instrument, and sponge counts were correct. The blood loss was minimal. The patient tolerated the procedure well, and was sent to the recovery room in stable condition.

Pathology Report
05/08/2007

Clinical Information: Bilateral thyroid nodules

Specimen:
Thyroid

Gross Description:
The specimen consists of a total thyroidectomy weighing 21 grams. The right lobe measures 4.5 x 3.1 x 2.8 cm and the left lobe measures 4.1 x 1.8 x 1.2 cm. Sectioning through the specimen shows a right lobe cystic nodule measuring 2.5 cm in diameter. Sections of the left lobe are submitted in Cassettes 1A and 1B, sections of the isthmus are submitted in Cassette 1C, and sections of the right lobe are submitted in Cassettes 1D through 1K.

Final Diagnosis:
Thyroid, total thyroidectomy: Nodular hyperplasia. Papillary microcarcinoma, 1 mm in cross diameter. Margins free. See CAP checklist.

Specimen Type: Total thyroidectomy
Tumor Site: Unspecified
Tumor Focality: Unifocal
Histologic Type: Papillary microcarcinoma
Pathologic Staging: Primary tumor: pT1NXMX
Co-Reviewing Pathologist: Another pathologist has reviewed selected slides and concurs in the above interpretation.

Nuclear Medicine Thyroid Carcinoma Therapy
07/20/2007

Clinical Indication: Thyroid cancer

The patient was referred for thyroid cancer therapy with oral I-131.

Radiation safety precautions were explained to the patient and she indicated understanding. Expected course of treatment was discussed with the patient including the need to contact her physician for follow-up evaluation and initiation of Synthroid therapy within the next week.

Oral dose of 152.1 mCi of I-131 was administered orally without complication. The patient tolerated this well and will return early next week for baseline whole body imaging.

Oral I-131 thyroid cancer therapy with 152.1 mCi of I-131. No complication.

Nuclear Medicine Post Thyroid Ablation Therapy Imaging
07/25/2007

Clinical Indication: Thyroid cancer follow-up

Patient was dosed with 150 mCi of activity on 07/20/2007 and now returns for whole body imaging.

Intense activity is seen in the thyroid bed, an otherwise normal distribution of salivary and bowel activity is demonstrated.

Intense thyroid bed activity with otherwise normal distribution on whole body thyroid imaging.