A 50-year-old woman with goiter develops mental status changes, nausea, and vomiting shortly after undergoing elective breast surgery. On examination, she is extremely anxious, tachycardic, and febrile to 39.5°C. Urgent treatment for her condition should include all of the following EXCEPT?

1. Beta blockade
2. Propylthiouracil (PTU)
3. Antipyretics
4. Intravenous dantrolene
5. Fluid resuscitation
A 45-year-old woman has a sticking sensation in her throat during swallowing. She is unable to sleep at night because of dyspnea. During examination she experiences flushing when her arms are raised over her head. She has a smooth large thyroid gland without nodules. A chest x-ray is shown.
The most appropriate treatment for this patient would be:

1. Video-assisted total thyroidectomy (VAT)
2. Total thyroidectomy via right anterior thoracotomy
3. **Total thyroidectomy via collar incision**
4. Radioactive iodine ablation
5. Thyroxine suppression
The patient pictured is scheduled to undergo thyroidectomy for presumed multinodular goiter. Her chest x-ray is also shown.
The most likely life-threatening postoperative complication she is at risk for would be:

1. Hypoparathyroidism
2. Unilateral recurrent nerve injury
3. Bilateral recurrent nerve injury
4. **Tracheomalacia**
5. Esophageal perforation
The recommended management for this condition would be:

1. Routine intravenous calcium infusion
2. Extubation while the patient is awake in the PACU or ICU
3. Injection of vocal cords with silicone
4. **Tracheostomy**
5. Routine esophagography
A 23-year-old woman in her second trimester of pregnancy has symptoms of heat intolerance, tremors, and palpitations. Laboratory studies reveal a suppressed serum thyroid-stimulating hormone (TSH) level of 0.01 IU. She also has positive anti-TSH receptor antibodies.

The most appropriate therapy for this patient would be:

1. Carbimazole
2. **Propylthiouracil (PTU)**
3. Radioactive iodine treatment
4. Total thyroidectomy
5. Subtotal thyroidectomy
Which of the following statements about medullary thyroid cancer (MTC) is TRUE?

1. All forms are hereditary
2. **The most aggressive form is MEN2B**
3. Normal calcitonin levels exclude the diagnosis
4. MEN2B is associated with mucosal neuromas, pheochromocytoma, parathyroid hyperplasia, and MTC
5. MEN2A patients usually exhibit findings consistent with pheochromocytoma prior to MTC
A 44-year-old woman has papillary thyroid carcinoma of the right lobe confirmed by fine-needle aspiration. Ultrasound study stages the tumor as T1 (1.5 cm), N1b (suspicious ipsilateral cervical node).

**Optimal surgical management would be:**

1. Right thyroid lobectomy, selective dissection of the right side
2. Right thyroid lobectomy, level VI (central compartment) node dissection
3. Total thyroidectomy, selective dissection on the right side
4. **Total thyroidectomy, level VI dissection, and selective dissection of the right side**
5. Total thyroidectomy
A 27-year-old man with familial MEN1 syndrome undergoes a 3.5-gland parathyroidectomy. Postoperatively, he requires calcium (6 g/day) and magnesium supplementation to maintain a low-normal ionized calcium level. His parathyroid hormone level is 12ng/L (normal, 15 to 50 ng/L). His creatinine is 1.0 g/dL.

Which of the following likely accounts for this patient’s ongoing calcium requirement?

1. **Vitamin D deficiency**
2. Inadequate calcium intake
3. High dietary phosphate
4. Low parathyroid hormone
5. Renal clearance of calcium
A 64-year-old man has a solitary thyroid nodule discovered during a screening carotid duplex. Fine-needle aspiration of the nodule shows a predominance of Hürthle cells with scant amounts of colloid and no evidence of malignancy. **The next step should be:**

1. Total thyroidectomy
2. Repeat biopsy in 6 months
3. Thyroid suppression therapy
4. **Hemithyroidectomy with isthmusectomy**
5. Total thyroidectomy with central node dissection
Papillary thyroid cancer

1. Fine-needle aspiration biopsy provides definitive diagnosis
2. Total thyroidectomy with or without lymph node dissection the treatment of choice
3. **Both 1 and 2**
4. Neither 1 nor 2
Follicular thyroid cancer

1. Fine-needle aspiration biopsy provides definitive diagnosis
2. **Total thyroidectomy with or without lymph node dissection** the treatment of choice
3. Both 1 and 2
4. Neither 1 nor 2
Anaplastic thyroid cancer

1. Fine-needle aspiration biopsy provides definitive diagnosis
2. Total thyroidectomy with or without lymph node dissection the treatment of choice
3. Both 1 and 2
4. Neither 1 nor 2
Lateral aberrant thyroid is:

1. Abnormally descended thyroid tissue in the lateral neck
2. Associated with thyroglossal duct cyst
3. **Cervical lymph node metastases from papillary cancer**
4. Cervical lymph node enlargement as a result of Hashimoto’s disease
5. Asymmetric goiter protruding predominantly to one side of the neck
Derived from thyroid c-cells

1. Papillary thyroid cancer
2. Follicular thyroid cancer
3. **Medullary thyroid cancer**
4. Anaplastic thyroid cancer
5. Follicular variant of papillary thyroid cancer
Thyroidectomy not indicated

1. Papillary thyroid cancer
2. Follicular thyroid cancer
3. Medullary thyroid cancer
4. Anaplastic thyroid cancer
5. Follicular variant of papillary thyroid cancer
Associated with multiple endocrine neoplasia type 2 (MEN2)

1. Papillary thyroid cancer
2. Follicular thyroid cancer
3. Medullary thyroid cancer
4. Anaplastic thyroid cancer
5. Follicular variant of papillary thyroid cancer
A 60-year-old man has a 4-cm left thyroid nodule. Fine-needle aspiration (FNA) of the nodule is interpreted as papillary cancer. No lymph nodes are palpable. Management of this patient should include all of the following EXCEPT:

1. Total thyroidectomy
2. Radioactive iodine ablation
3. Suppressive thyroxine
4. **Modified left radical neck dissection**
5. Serum thyroglobulin monitoring
A 42-year-old woman is a known member of a multiple endocrine neoplasia type 2A (MEN2A) kindred. She and her mother have both had total thyroidectomy for medullary carcinoma of the thyroid (MCT). She would like her 6-year-old daughter to be tested for possible MCT. The child’s physical examination is normal.

Which of the following should be done?

1. Serum calcitonin and carcinoembryonic antigen (CEA) determinations
2. Basal and stimulated serum calcitonin levels
3. Iodine 131 radionuclide scan
4. Annual physical examinations; fine-needle aspiration if a thyroid mass is appreciated, or an ultrasound study at age 12
5. RET oncogene determination
Testing for this child yields positive results. The next step should be:

1. Neck and chest computed tomographic (CT) scan
2. Neck and chest positron emission tomographic (PET) scan
3. **Total thyroidectomy with central lymph node dissection**
4. Subtotal thyroidectomy with ipsilateral lymph node dissection
5. Annual surveillance with ultrasound studies until age 12