

THYROID DISEASES

Clinical Surgery Ebook

High-yield diagnosis, operative decision-making, and postoperative care

Surgical Anatomy & Physiology • Goitre & Thyroid Nodules
Hyperthyroidism & Thyroid Storm • Thyroiditis
Thyroid Malignancy • Thyroid Surgery & Emergencies
Postoperative Complications • Clinical MCQ Bank

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A concise, examination-oriented text for medical students and surgical trainees, with high-yield clinical MCQs for viva and ward-based teaching

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Scope

Goitre, thyroid nodules, hyperthyroidism, thyroiditis, thyroid malignancy, thyroid emergencies, thyroid surgery, postoperative complications, and clinical MCQs for medical students.

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Teaching Note

The ebook is written for surgery viva and ward teaching. It emphasizes clinical pattern recognition, investigation choice, operative decisions, and postoperative complication recognition.

1. Surgical Anatomy and Physiology

- The thyroid lies anterior to the trachea with two lateral lobes joined by the isthmus. Enlargement moves with swallowing because of its pretracheal fascial attachment.
- The recurrent laryngeal nerves run close to the inferior thyroid artery and enter near the cricothyroid joint. Injury causes hoarseness, aspiration, or airway compromise if bilateral.
- The external branch of the superior laryngeal nerve lies near the superior thyroid vessels. Injury affects voice pitch and projection, especially in professional voice users.
- Parathyroid preservation and vascular supply are central goals during thyroidectomy; devascularization can cause postoperative hypocalcaemia.
- Thyroid hormones regulate metabolic rate. Surgical patients with uncontrolled thyrotoxicosis or severe hypothyroidism have increased perioperative risk.

2. Clinical Assessment and Thyroid Investigations

- History should cover swelling duration, growth rate, pain, pressure symptoms, dysphagia, dyspnoea, voice change, thyrotoxic symptoms, hypothyroid symptoms, irradiation history, family history, and endocrine syndromes.
- Examination assesses movement with swallowing, nodularity, tenderness, retrosternal extension, cervical nodes, tracheal deviation, vocal cord symptoms, eye signs, tremor, pulse, and skin changes.
- TSH is the first-line biochemical test in many presentations. Free T4 and T3 clarify thyrotoxicosis or hypothyroidism when TSH is abnormal or clinical suspicion is strong.
- Ultrasound characterizes nodules and cervical lymph nodes. Fine needle aspiration cytology is central for suspicious or clinically important nodules.
- CT neck and chest is useful for retrosternal goitre, tracheal compression, invasive malignancy, or complex recurrent disease; iodinated contrast matters if radioiodine treatment is being planned.

3. Goitre and Compressive Thyroid Disease

- Goitre may be diffuse, multinodular, toxic, non-toxic, retrosternal, inflammatory, or malignant. The clinical task is to define function, anatomy, compression, and cancer risk.
- Multinodular goitre often presents with long-standing neck swelling. Sudden enlargement suggests haemorrhage into a nodule, thyroiditis, lymphoma, or anaplastic malignancy.
- Compressive symptoms include dyspnoea, stridor, dysphagia, choking when supine, and voice change. Tracheal deviation or narrowing should prompt imaging and airway planning.
- Retrosternal goitre is suggested by lower pole not being palpable, tracheal compression, venous congestion, or mediastinal extension on imaging.
- Surgery is considered for pressure symptoms, suspicious nodules, cosmetic burden, toxic nodular disease, progressive enlargement, or significant retrosternal extension.

4. Solitary Thyroid Nodule and Risk Stratification

- A solitary thyroid nodule requires assessment of cancer risk and thyroid function. Red flags include hard fixed mass, rapid growth, cervical nodes, hoarseness, previous irradiation, and extremes of age.
- A suppressed TSH suggests autonomous function and supports radionuclide assessment where available. A hot functioning nodule is less likely malignant than a cold suspicious nodule.
- Ultrasound risk features include solid hypoechoic composition, irregular margins, microcalcifications, taller-than-wide shape, extrathyroidal extension, and abnormal cervical lymph nodes.
- Fine needle aspiration cytology guides management, but follicular neoplasm cannot be reliably distinguished from follicular carcinoma by cytology alone because capsular or vascular invasion is required.
- Diagnostic lobectomy is considered for indeterminate cytology, follicular neoplasm, or a clinically suspicious unilateral lesion when definitive cytological diagnosis is not possible.

5. Hyperthyroidism and Thyroid Storm in Surgical Practice

- Common surgical causes of thyrotoxicosis include Graves disease, toxic multinodular goitre, and toxic adenoma. Symptoms include weight loss, heat intolerance, tremor, palpitations, diarrhoea, anxiety, and menstrual disturbance.
- Graves disease may show diffuse goitre, bruit, ophthalmopathy, pretibial myxoedema, and positive receptor antibodies. Toxic multinodular goitre often occurs in older patients with nodular enlargement.
- Surgery for hyperthyroidism requires preparation to restore euthyroid state, control sympathetic symptoms, and reduce perioperative thyroid storm risk.
- Thyroid storm presents with fever, tachyarrhythmia, agitation, heart failure, vomiting, diarrhoea, and altered mental state. It is a life-threatening endocrine emergency.
- In suspected thyroid storm, management includes resuscitation, beta blockade when safe, antithyroid therapy, iodine after antithyroid drug timing, steroids, cooling, and treatment of the trigger.

6. Thyroiditis and Hypothyroid States Relevant to Surgery

- Painful tender thyroid enlargement with fever and raised inflammatory markers suggests subacute or infective thyroiditis rather than simple nodular goitre.
- Hashimoto thyroiditis can produce firm diffuse goitre, hypothyroidism, and a background risk of thyroid lymphoma in longstanding disease.
- Postpartum and painless thyroiditis can cause transient thyrotoxic and hypothyroid phases; management differs from Graves disease because hormone release, not overproduction, is the key mechanism.
- Severe hypothyroidism increases anaesthetic and postoperative risk through bradycardia, hypothermia, impaired ventilation, ileus, hyponatraemia, and reduced drug clearance.
- Elective surgery is ideally delayed until clinically significant hypothyroidism is corrected, unless urgent surgical disease requires balanced perioperative endocrine support.

7. Thyroid Cancer: Papillary, Follicular, Medullary, Anaplastic, Lymphoma

- Papillary carcinoma is commonly associated with lymphatic spread to cervical nodes and generally has good prognosis when treated appropriately.
- Follicular carcinoma spreads haematogenously and diagnosis depends on capsular or vascular invasion; cytology may report follicular neoplasm rather than carcinoma.
- Medullary thyroid carcinoma arises from parafollicular C cells, secretes calcitonin, and can be sporadic or associated with MEN syndromes. Pheochromocytoma must be excluded before thyroid surgery in MEN-related disease.
- Anaplastic carcinoma presents in older patients with rapidly enlarging hard mass, dysphagia, stridor, hoarseness, and poor prognosis. Airway assessment is often urgent.
- Thyroid lymphoma may present as rapid enlargement in a background of Hashimoto thyroiditis and needs tissue diagnosis because treatment differs from thyroidectomy for differentiated cancer.

8. Thyroid Surgery: Indications, Preparation, and Operative Principles

- Common operations include lobectomy, total thyroidectomy, near-total thyroidectomy, completion thyroidectomy, and neck dissection where nodal disease requires it.
- Indications include malignant or suspicious nodules, symptomatic multinodular goitre, retrosternal goitre, selected hyperthyroid states, recurrent cystic lesions, cosmetic impact, and compressive symptoms.
- Preoperative preparation includes thyroid function optimization, vocal cord assessment when voice symptoms or reoperative surgery are present, calcium risk awareness, and airway planning in large or retrosternal goitre.
- Operative principles include capsular dissection, identification and protection of recurrent laryngeal nerves, preservation of parathyroids, secure haemostasis, and appropriate lymph node management.
- Day-case or short-stay thyroid surgery requires careful patient selection, stable airway, haemostasis confidence, calcium plan, and clear return precautions.

9. Post-thyroidectomy Care and Complications

- Early postoperative priorities are airway safety, neck swelling, bleeding, voice quality, calcium symptoms, pain control, swallowing, and drain or wound assessment where relevant.
- Neck haematoma can cause rapidly progressive airway compromise. Tight swelling, stridor, respiratory distress, or venous congestion requires immediate senior help and wound decompression if airway is threatened.
- Hypocalcaemia presents with perioral tingling, paraesthesia, cramps, carpopedal spasm, tetany, or seizures. It usually relates to parathyroid stunning, removal, or devascularization.
- Recurrent laryngeal nerve injury causes hoarseness with unilateral injury and airway obstruction with bilateral injury. Laryngoscopy confirms vocal cord movement.
- Other complications include superior laryngeal nerve injury, wound infection, seroma, hypertrophic scar, hypothyroidism, and recurrent disease depending on pathology and operation.

10. Rapid Clinical Reasoning Tables

Pattern Recognition Table

Clinical pattern	Most likely reasoning step
Diffuse toxic goitre, eye signs, bruit	Graves disease
Older patient, nodular goitre, T3-predominant thyrotoxicosis	Toxic multinodular goitre
Solitary hot nodule with suppressed rest of gland	Toxic adenoma
Hard fixed thyroid mass with hoarseness or nodes	Malignancy until proved otherwise
Rapid enlargement in older patient with stridor	Anaplastic carcinoma or lymphoma
Tender thyroid after viral illness, high inflammatory markers	Subacute thyroiditis
Perioral tingling after thyroidectomy	Hypocalcaemia
Tense neck swelling and stridor after thyroidectomy	Neck haematoma threatening airway

Postoperative Danger Signs

Postoperative Danger Signs

Airway — stridor, neck swelling, respiratory distress, inability to lie flat.

Voice — new hoarseness, weak cough, aspiration, bilateral cord symptoms.

Calcium — perioral tingling, cramps, tetany, seizures, prolonged QT.

Sepsis or wound — fever, increasing pain, erythema, discharge, expanding swelling.

Endocrine — thyrotoxic crisis features or symptomatic hypothyroidism depending on context.

11. Clinical MCQ Bank and Answer Key

Instruction

Choose the single best answer. The questions emphasize clinical reasoning, examination findings, investigations, emergency decisions, operative planning, and postoperative care.

Q1. A 34-year-old woman presents with diffuse goitre, weight loss, tremor, palpitations, lid lag, and a thyroid bruit. TSH is suppressed and free T4 is elevated. She is planned for definitive treatment after poor tablet compliance. What is the most likely diagnosis?

- A. De Quervain thyroiditis
- B. Graves disease
- C. Hashimoto thyroiditis
- D. Medullary carcinoma
- E. Toxic adenoma

Answer: B — Graves disease

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q2. A 48-year-old woman has a solitary thyroid nodule. Ultrasound shows a hypoechoic solid lesion with irregular margins and microcalcifications. TSH is normal and there are no compressive symptoms. What is the most appropriate next investigation?

- A. Fine needle aspiration cytology
- B. Indirect laryngoscopy only
- C. Serum amylase
- D. Thyroid lobectomy without cytology
- E. Upper gastrointestinal endoscopy

Answer: A — Fine needle aspiration cytology

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q3. A 62-year-old man has a long-standing multinodular goitre and new dyspnoea when lying flat. Examination shows tracheal deviation and lower border of the gland is not palpable. Chest inlet imaging suggests mediastinal extension. What is the most likely diagnosis?

- A. Branchial cyst
- B. Retrosternal goitre
- C. Subacute thyroiditis
- D. Thyroglossal cyst
- E. Zenker diverticulum

Answer: B — Retrosternal goitre

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q4. A 57-year-old woman has rapidly enlarging hard thyroid swelling, dysphagia, hoarseness, and stridor. Examination shows fixed mass and cervical nodes. Thyroid tests are near normal. What is the most likely diagnosis?

- A. Anaplastic thyroid carcinoma
- B. Graves disease
- C. Simple colloid goitre
- D. Toxic adenoma
- E. Viral thyroiditis

Answer: A — Anaplastic thyroid carcinoma

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q5. A 39-year-old woman undergoes total thyroidectomy. Four hours later she becomes anxious with neck tightness, swelling, stridor, and respiratory distress. The wound is tense and bruised. What is the immediate priority?

- A. Delayed outpatient review
- B. Immediate wound decompression and airway support
- C. Oral calcium supplementation
- D. Routine ultrasound next day
- E. Thyroxine dose reduction

Answer: B — Immediate wound decompression and airway support

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q6. A 46-year-old woman develops perioral tingling and carpopedal spasm one day after total thyroidectomy. Chvostek sign is positive. ECG shows QT prolongation. What is the most likely complication?

- A. Hypocalcaemia
- B. Hypokalaemia
- C. Laryngeal oedema
- D. Pulmonary embolism
- E. Thyroid storm

Answer: A — Hypocalcaemia

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q7. A 51-year-old man has a thyroid nodule and raised calcitonin. His father had endocrine tumours. Examination shows firm thyroid nodule and cervical node. Which associated tumour must be excluded before thyroidectomy?

- A. Insulinoma
- B. Meningioma
- C. Pheochromocytoma
- D. Pituitary prolactinoma
- E. Renal cell carcinoma

Answer: C — Pheochromocytoma

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q8. A 29-year-old woman has fever, painful tender thyroid enlargement, and neck pain radiating to the jaw after an upper respiratory illness. ESR is raised and thyroid uptake is low. What is the most likely diagnosis?

- A. Acute Graves disease
- B. Follicular carcinoma
- C. Papillary carcinoma
- D. Subacute thyroiditis
- E. Toxic multinodular goitre

Answer: D — Subacute thyroiditis

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q9. A 44-year-old singer notices inability to reach high notes after thyroid surgery. Her speaking voice is almost normal, and vocal cords move symmetrically. Which structure was most likely injured?

- A. External branch of superior laryngeal nerve
- B. Hypoglossal nerve
- C. Internal jugular vein
- D. Marginal mandibular nerve
- E. Phrenic nerve

Answer: A — External branch of superior laryngeal nerve

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q10. A 41-year-old woman has hoarseness after thyroidectomy. Laryngoscopy shows one immobile vocal cord in the paramedian position. Calcium is normal and wound is soft. What is the most likely complication?

- A. Bilateral superior laryngeal nerve injury
- B. Hypocalcaemic tetany
- C. Recurrent laryngeal nerve palsy
- D. Thyroid storm
- E. Tracheomalacia

Answer: C — Recurrent laryngeal nerve palsy

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q11. A 55-year-old woman with multinodular goitre has suppressed TSH and elevated T3 with mild T4 elevation. She has atrial fibrillation and weight loss. Examination shows nodular goitre without eye signs. What is the most likely diagnosis?

- A. Hashimoto thyroiditis
- B. Medullary carcinoma
- C. Toxic multinodular goitre
- D. Transient thyroiditis
- E. Simple euthyroid goitre

Answer: C — Toxic multinodular goitre

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q12. A 36-year-old woman has a 2 cm thyroid nodule. TSH is suppressed. Radionuclide scan shows intense uptake in the nodule with suppression of surrounding thyroid tissue. What is the most likely diagnosis?

- A. Cold papillary carcinoma
- B. Functioning toxic adenoma
- C. Hashimoto thyroiditis
- D. Medullary carcinoma
- E. Non-functioning cyst

Answer: B — Functioning toxic adenoma

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q13. A 50-year-old woman has FNAC reported as follicular neoplasm. Ultrasound shows a solitary encapsulated nodule without nodal disease. Why can cytology not confirm follicular carcinoma?

- A. Calcitonin is required for diagnosis
- B. Capsular or vascular invasion must be shown
- C. Cervical node biopsy is always diagnostic
- D. TSH must be suppressed first
- E. Ultrasound cannot see the thyroid

Answer: B — Capsular or vascular invasion must be shown

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q14. A 32-year-old woman has papillary thyroid carcinoma with suspicious lateral cervical lymph nodes on ultrasound. FNAC from a node confirms metastatic thyroid carcinoma. Which pattern best describes this cancer spread?

- A. Direct spread only
- B. Haematogenous spread to bone only
- C. Lymphatic spread to cervical nodes
- D. Peritoneal dissemination
- E. Transcoelomic spread

Answer: C — Lymphatic spread to cervical nodes

Source: *Bailey & Love's Short Practice of Surgery*, relevant chapter on thyroid and endocrine surgery.

Q15. A 67-year-old woman with Hashimoto thyroiditis develops rapidly enlarging thyroid mass with pressure symptoms. Examination shows firm diffuse enlargement and cervical nodes. Thyroid tests show hypothyroidism. What diagnosis should be suspected?

- A. Branchial cyst
- B. Graves ophthalmopathy
- C. Thyroid lymphoma
- D. Thyroglossal cyst
- E. Toxic adenoma

Answer: C — Thyroid lymphoma

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q16. A 45-year-old man is scheduled for thyroidectomy for Graves disease. He is anxious, tachycardic, tremulous, and still biochemically thyrotoxic. What is the safest surgical decision?

- A. Cancel preparation and operate immediately
- B. Delay elective surgery until controlled
- C. Give no beta blocker before surgery
- D. Proceed under local anaesthesia
- E. Stop antithyroid treatment permanently

Answer: B — Delay elective surgery until controlled

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q17. A 40-year-old woman after total thyroidectomy has bilateral vocal cord immobility, inspiratory stridor, and increasing work of breathing. The wound is soft and calcium is normal. What is the most likely mechanism?

- A. Bilateral recurrent laryngeal nerve palsy
- B. External laryngeal nerve palsy
- C. Hypocalcaemic tetany
- D. Postoperative hypothyroidism
- E. Superior vena cava obstruction

Answer: A — Bilateral recurrent laryngeal nerve palsy

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q18. A 52-year-old woman has a painless thyroid nodule and enlarged ipsilateral cervical lymph node. FNAC from the thyroid confirms papillary carcinoma. What is the most appropriate additional assessment before definitive surgery?

- A. Cervical nodal ultrasound mapping
- B. Colonoscopy
- C. Cystoscopy
- D. Mammography only
- E. Serum lipase

Answer: A — Cervical nodal ultrasound mapping

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q19. A 30-year-old woman has diffuse firm goitre, lethargy, weight gain, cold intolerance, and positive thyroid antibodies. TSH is raised and free T4 is low. What is the most likely diagnosis?

- A. De Quervain thyroiditis
- B. Graves disease
- C. Hashimoto thyroiditis
- D. Medullary carcinoma
- E. Toxic adenoma

Answer: C — Hashimoto thyroiditis

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q20. A 58-year-old man with large retrosternal goitre has progressive stridor and CT evidence of marked tracheal compression. He is clinically euthyroid. What is the main indication for surgery?

- A. Cosmetic scar concern
- B. High serum amylase
- C. Pressure on the airway
- D. Raised calcitonin alone
- E. Transient thyroid pain

Answer: C — Pressure on the airway

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q21. A 47-year-old woman has total thyroidectomy. On the evening of surgery she is comfortable but has a weak breathy voice. There is no neck swelling or hypocalcaemic symptom. What investigation best assesses vocal cord movement?

- A. Flexible laryngoscopy
- B. Plain abdominal radiograph
- C. Serum bilirubin
- D. Serum troponin
- E. Urea breath test

Answer: A — Flexible laryngoscopy

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q22. A 25-year-old woman has a midline neck swelling that moves with protrusion of the tongue. Thyroid gland is palpable separately. Ultrasound confirms a cystic tract. What is the most likely diagnosis?

- A. Branchial cyst
- B. Dermoid cyst
- C. Laryngocele
- D. Thyroglossal duct cyst
- E. Thyroid lymphoma

Answer: D — Thyroglossal duct cyst

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q23. A 61-year-old man with uncontrolled thyrotoxicosis develops fever, agitation, vomiting, atrial fibrillation, and heart failure after emergency surgery. What is the most likely diagnosis?

- A. Adrenal incidentaloma
- B. Hypocalcaemic crisis
- C. Myxoedema coma
- D. Thyroid storm
- E. Vocal cord palsy

Answer: D — Thyroid storm

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q24. A 35-year-old woman has Graves disease with a large goitre, pressure symptoms, and desire for pregnancy soon. She prefers definitive treatment. Which treatment is most suitable?

- A. Diagnostic colonoscopy
- B. Long-term analgesics only
- C. Near-total or total thyroidectomy
- D. Pilonidal sinus excision
- E. Watchful waiting only

Answer: C — Near-total or total thyroidectomy

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q25. A 43-year-old woman has a thyroid nodule and hoarseness before surgery. Examination shows firm nodule and ipsilateral node. What preoperative test is particularly important for operative planning?

- A. Flexible laryngoscopy
- B. Serum creatinine only
- C. Skin prick testing
- D. Sputum culture
- E. Urine microscopy

Answer: A — Flexible laryngoscopy

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q26. A 49-year-old woman has a painful thyroid swelling and fever. Ultrasound suggests abscess formation in the thyroid. She is toxic and has raised white cell count. What is the most appropriate management principle?

- A. Antibiotics with drainage when abscess is present
- B. Beta blocker alone
- C. Elective radioiodine only
- D. Immediate thyroxine suppression
- E. No treatment required

Answer: A — Antibiotics with drainage when abscess is present

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q27. A 38-year-old woman has a 4 cm indeterminate thyroid nodule in the right lobe. FNAC suggests follicular neoplasm, left lobe is normal, and no nodes are seen. What operation is commonly diagnostic and therapeutic initially?

- A. Appendicectomy
- B. Hemithyroidectomy
- C. Mastectomy
- D. Parotidectomy
- E. Splenectomy

Answer: B — Hemithyroidectomy

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q28. A 53-year-old woman after thyroidectomy develops hoarseness that improves over weeks. Laryngoscopy initially showed unilateral cord paresis. What explanation best fits the recovery?

- A. Permanent bilateral nerve transection
- B. Temporary neuropraxia of recurrent laryngeal nerve
- C. Thyroid storm
- D. Uncorrected medullary carcinoma
- E. Wound haematoma

Answer: B — Temporary neuropraxia of recurrent laryngeal nerve

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q29. A 63-year-old man has anaplastic thyroid carcinoma with stridor and dysphagia. CT shows local invasion around the airway. What is the most urgent clinical priority?

- A. Airway assessment and stabilization
- B. Cosmetic thyroid scar planning
- C. Routine FNAC in six months
- D. Serum cholesterol measurement
- E. Watchful waiting

Answer: A — Airway assessment and stabilization

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Q30. A 42-year-old woman has completion thyroidectomy after cancer diagnosis on lobectomy specimen. Postoperatively she needs long-term follow-up. Which issue is specifically expected after total thyroid tissue removal?

- A. Lifelong thyroid hormone replacement
- B. Permanent insulin therapy
- C. Routine appendicectomy
- D. Splenic vaccination only
- E. Warfarin for all patients

Answer: A — Lifelong thyroid hormone replacement

Source: Bailey & Love's Short Practice of Surgery, relevant chapter on thyroid and endocrine surgery.

Answer Key

1. B — Graves disease	11. C — Toxic multinodular goitre	21. A — Flexible laryngoscopy
2. A — Fine needle aspiration cytology	12. B — Functioning toxic adenoma	22. D — Thyroglossal duct cyst
3. B — Retrosternal goitre	13. B — Capsular or vascular invasion must be shown	23. D — Thyroid storm
4. A — Anaplastic thyroid carcinoma	14. C — Lymphatic spread to cervical nodes	24. C — Near-total or total thyroidectomy
5. B — Immediate wound decompression and airway support	15. C — Thyroid lymphoma	25. A — Flexible laryngoscopy
6. A — Hypocalcaemia	16. B — Delay elective surgery until controlled	26. A — Antibiotics with drainage when abscess is present
7. C — Pheochromocytoma	17. A — Bilateral recurrent laryngeal nerve palsy	27. B — Hemithyroidectomy
8. D — Subacute thyroiditis	18. A — Cervical nodal ultrasound mapping	28. B — Temporary neuropraxia of recurrent laryngeal nerve
9. A — External branch of superior laryngeal nerve	19. C — Hashimoto thyroiditis	29. A — Airway assessment and stabilization
10. C — Recurrent laryngeal nerve palsy	20. C — Pressure on the airway	30. A — Lifelong thyroid hormone replacement

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