General surgery



Endocrine rotation - Past papers

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-The colored question numbers are mentioned more than once so focus on them-

- 1. All of the following findings are consistent with the diagnosis of Conn's syndrome EXCEPT:
- A) Hypertension
- B) Hypernatremia
- C) High plasma renin
- D) Hypokalaemia
- E) Age < 20

ANSWER: C

- 2. All are features that suggest a benign adrenal mass on CT scan with adrenal protocol EXCEPT:
- A) Size of a 3 cm in diameter
- B) Sharp margins, smooth & homogenous
- C) Rich with fat component
- D) Density more than 30 Hu (Hounsfield unit) on non-contrast images
- E) Washout more than 60% at 15 min

ANSWER: D

- 3. For a patient with adrenal mass; all of the following are features suggestive of Cushing syndrome EXCEPT:
- A) Moon face
- B) Central obesity
- C) Hypokalaemia
- D) Diabetes mellitus
- E) Hypertension

ANSWER: C

- 4. A 45-year-old woman has a 2-cm solitary, non-functioning thyroid nodule, & fine needle cytology is Bethesda 4. This lady is considered to have:
- A) Follicular neoplasm
- B) Malignant cytology
- C) Atypia of undetermined significance
- D) Inadequate cytology
- E) Benign cytology

- 5. A 35-yaar-old male patient who is previously healthy presents with repeated episodes of headache, diaphoresis, & palpitations. His blood pressure was 200/160. All of the following measures are useful to evaluate him EXCEPT:
- A) Serum renin levels
- B) Serum glucose levels
- C) Plasma free metanephrines
- D) Clonidine suppression test
- E) 24-hour urine catecholamine

ANSWER: B

- 6. Regarding the sublingual gland, one is TRUE:
- A) It is the commonest site of stone formation
- B) It drains through the Wharton's duct
- C) It is the least common site for malignancy
- D) It is a single gland under the tongue
- E) Unlikely to be involved with ranula

ANSWER: B

- 7. All of the following are true regarding insulinoma EXCEPT:
- A) It improves upon giving glucose
- B) Hypoglycaemic symptoms occur after fasting or exercise
- C) It is a benign tumour in most of the cases
- D) It is associated with low C-peptide
- E) Must rule out sulfonylurea

ANSWER: D

- 8. Which of the following is the most common functional neuroendocrine tumour of the pancreas?
- A) Insulinoma
- B) Glucagonoma
- C) Gastrinoma
- D) VIPoma
- E) Somatostatinoma

9. MIBG (metaiodobenzylguanidine) scan is useful in the diagnosis of which of the

10. What is the most common malignant tumour of the parafollicular cells of the thyroid

11. A 68-year-old male patient presented with an enlarged upper deep cervical lymph node. He is a smoker & his physical exam was unremarkable. The next step in the management should be:

- A) Fine needle aspiration cytology from the node
- B) CT scan of the neck
- C) MRI of the neck & chest
- D) Excisional biopsy
- E) Neck dissection

ANSWER: A

12. Which of the following tumours is more common in iodine deficient areas?

- A) Medullary neoplasms
- B) Papillary neoplasms
- C) Follicular neoplasms
- D) Thyroid Lymphoma
- E) Anaplastic neoplasms

ANSWER: C

- 13. Because of the anatomy & physiology of the submandibular gland, it is commonly involved with which of the following?
- A) Recurrent infection
- B) Malignant tumours
- C) Stone formation
- D) Warthin's tumour
- E) Hyperplasia of the gland

ANSWER: C

- 14. Midline neck masses in children can include all of the following EXCEPT:
- A) Lymphadenopathy
- B) Branchial Cyst
- C) Thyroglossal duct remnants
- D) Thymus cysts
- E) Dermoid cysts

ANSWER: B

- 15. An 11-year-old male patient came to your clinic with a neck mass. He has no history of radiation exposure & a negative family history of thyroid cancer. Further assessment revealed a solid mass on sonogram, & cold nodule on scan. You suspect a thyroid neoplasm. This patient most probably has:
- A) Papillary thyroid tumour
- B) Medullary thyroid tumour
- C) Follicular thyroid tumour
- D) Anaplastic thyroid tumour
- E) Hurthle cell neoplasm

ANSWER: A

- 16. In the adrenal glands, which hormone is produced by the zona glomerulosa?
- A) Aldosterone
- B) Cortisone
- C) Androstenedione
- D) Adrenaline
- E) Estradiol

17. Which of the following is NOT an operative indication for primary hyperparathyroidism?

- A) Serum calcium of 11.1 mg/dL
- B) Very low bone density
- C) Renal impairment
- D) Age of 40 years old
- E) Renal stones

ANSWER: A

18. All of the following statements about solitary thyroid nodules are true EXCEPT:

- A) They are more prevalent in women
- B) In the adult population, more than 90% are benign
- C) Fine needle aspiration is indicated when the size is less than 10 mm
- D) When it extends retro-sternum, it is less likely to be malignant
- E) The risk of a hot nodule being malignant is very small

ANSWER: C

19. Regarding the minor salivary glands, which of the following is true?

- A) They have a high malignant potential
- B) They are unlikely to be affected by radiation therapy
- C) They are scattered from oral cavity down to the vocal cords
- D) They have a defined duct for drainage
- E) Their secretion is not affected by atropine

ANSWER: C

20. Serum calcium level is usually elevated in all of the following EXCEPT:

- A) Hyperparathyroidism due to ectopic adenoma
- B) Primary hyperparathyroidism
- C) Tertiary hyperparathyroidism
- D) Secondary hyperparathyroidism
- E) Vitamin D intoxication

ANSWER: D

21. All of the following suggest a familial form of medullary thyroid carcinoma (MTC) EXCEPT:

- A) The tumour is multifocal
- B) Positive B-Raf mutation
- C) The tumour is bilateral (foci of tumour are present in both thyroid lobes)
- D) Positive Ret-oncogene mutation
- E) The presence of C-cell hyperplasia in the pathologic examination of the resected lobe

ANSWER: B

22. All of the following are true about follicular cancer EXCEPT:

- A) It disseminates via haematogenous
- B) It is less common than papillary cancer
- C) Bone is a site for metastasis
- D) It usually presents in the old age
- E) It is frequently multicentric

ANSWER: E

23. Diagnostic hemi-thyroidectomy is done for which of the following?

- A) 2 cm nodule with FNA consistent with papillary cancer
- B) 2 cm nodule with FNA consistent with follicular cancer
- C) 2 cm nodule with FNA consistent with medullary cancer
- D) FNA consistent with degenerative changes
- E) FNA that is inadequate

ANSWER: B

24. The most sensitive test for localization in primary hyperparathyroidism is:

- A) High-resolution ultra sound
- B) CT with contrast
- C) Sestamibi scan
- D) MRI
- E) CT without contrast

ANSWER: C

25. Which thyroid neoplasm is known to be multifocal?

- A) Medullary cancer
- B) Follicular cancer
- C) Papillary cancer
- D) Anaplastic cancer
- E) Follicular adenoma

ANSWER: C

26. All of the following are true regarding Hurthle cell carcinoma EXCEPT:

- A) It is also called oxyphilic cell carcinoma
- B) It is more aggressive than papillary & follicular carcinoma
- C) It is considered a variant of follicular carcinoma
- D) It shows abundant eosinophils under the microscope
- E) It is usually multifocal

ANSWER: D

27. All of the following about parathyroid adenoma are true EXCEPT:

- A) Sestamibi scan is the most accurate imaging technique used for localization of a parathyroid adenoma
- B) It is the second most common cause of primary hyperparathyroidism
- C) It usually affects one gland
- D) It is more common in women
- E) Hypercalcemia is seen on laboratory evaluation

ANSWER: B

28. In neuroendocrine response to stress, which phase can be prolonged & cause metabolic imbalance?

- A) Ebb phase
- B) Flow phase
- C) Balance phase
- D) Healing phase

29. Which of the following is true regarding the parathyroid glands?

- A) They contain two main types of cells; follicular & C cells
- B) Their blood supply is mainly by the superior thyroid artery
- C) They secrete parathyroid hormone to control calcium levels
- D) The superior & inferior parathyroid develop from the third & fourth branchial pouch, respectively
- E) They drain ipsilaterally by inferior thyroid vein only

ANSWER: C

30. Which of the following is treated with radioactive iodine ablation?

- A) Carcinoma with no iodine uptake
- B) Severe, uncontrolled thyrotoxicosis
- C) Hashimoto's thyroiditis in a pregnant lady
- D) Destruction-induced thyrotoxicosis
- E) Multinodular goitre

ANSWER: E

31. All of the following regarding pleomorphic adenoma are true EXCEPT:

- A) It is the most common salivary gland tumour
- B) It increases the risk of malignancy with advancing age
- C) It is ideally treated with total parotidectomy
- D) Recurrence is treated with radiotherapy
- E) It most commonly arises in the superficial lobe

ANSWER: C

32. All of the following are manifestations of hypercalcemia EXCEPT:

- A) Kidney stones
- B) Arrhythmias
- C) Oliguria
- D) Depression
- E) Hyperreflexia

ANSWER: C

33. What is the incidence of bilateral Pheochromocytoma in paediatrics?

- A) 10%
- B) 25%
- C) 50%
- D) 75%
- E) All cases are bilateral

ANSWER: B

34. What is the most common thyroid cancer?

- A) Papillary carcinoma
- B) Medullary carcinoma
- C) Follicular carcinoma
- D) Anaplastic carcinoma
- E) Fibrolymphovascular tumours

ANSWER: A

35. The most common malignant tumour of the submandibular gland is:

- A) Mucoepidermoid carcinoma
- B) Lymphoma
- C) Adenocarcinoma
- D) Adenoid cystic carcinoma
- E) Acinar cell carcinoma

ANSWER: D

36. Which salivary gland neoplasm only involves the parotid gland?

- A) Warthin's tumour
- B) Pleomorphic adenoma
- C) Mucoepidermoid carcinoma
- D) Adenoid cystic carcinoma
- E) Acinar cell tumour

- 37. A male patient presented with recurrent swelling upon eating. After imaging he was found to have a submandibular Stone 0.5 cm in its largest diameter, 1 cm away from the opening of Wharton's duct. What is the best management plan for this patient?
- A) Intra-oral removal
- B) Shock wave Lithotripsy
- C) Antibiotics for 2 weeks
- D) Advise good oral hygiene

ANSWER: A

- 38. A 68-year-old woman underwent tracheostomy for prolonged intubation. 2 weeks later she developed brisk bright red bleeding from the tracheostomy site that resolved without intervention. Her Hb is 10.2 g/dL, & coagulation studies are normal. What is the most likely diagnosis?
- A) Pneumonia
- B) Tracheitits
- C) Bleeding of granulation tissue in the stoma
- D) Tracheo-innominate fistula
- E) Bleeding from the anterior jugular vein

ANSWER: C

- 39. What is the most common parotid tumour?
- A) Mucoepidermoid carcinoma
- B) Adenoid cystic carcinoma
- C) Acinar cell tumour
- D) Warthin's tumour
- E) Pleomorphic adenoma

ANSWER: E

- **40.** The most common cause of hypothyroidism is:
- A) Multinodular goitre
- B) Thyroid dyshormonogenesis
- C) Follicular adenoma
- D) Graves' thyroiditis
- E) Hashimoto's thyroiditis

ANSWER: E

41. Which of the following is NOT TRUE regarding the carotid body:

- A) It is innervated through the glossopharyngeal and vagus nerves
- B) It is stimulated by hypoxia
- C) Carotid body tumour is malignant in 35% of cases
- D) Carotid body tumour most commonly occurs in middle age group
- E) Carotid body tumour best diagnosed by angiography

ANSWER: C

42. submandibular lymph nodes belong to which cervical group of lymph nodes?

- A) Group 1 cervical lymph nodes
- B) Group 2 cervical lymph nodes
- C) Group 3 cervical lymph nodes
- D) Group 4 cervical lymph nodes
- E) Group 5 cervical lymph nodes

ANSWER: A

- 43. All of the following may be found as part of MEN 1 syndrome EXCEPT:
- A) Gastrinoma
- B) Facial angiofibroma
- C) Parathyroid hyperplasia
- D) Pituitary adenoma
- E) Pheochromocytoma

ANSWER: E

- 44. All of the following findings are consistent with the diagnosis of Addison's disease EXCEPT:
- A) Fever
- B) Hypertension
- C) Dehydration
- D) Nausea
- E) Vomiting

- 45. The most common pancreatic neuroendocrine tumour in MEN 1 is:
- A) Insulinoma
- B) Somatostatinoma
- C) Glucagonoma
- D) Gastrinoma
- E) VIPoma

ANSWER: D

- 46. A 45-year-old gentleman presented with a right parotid mass of 2-year duration. His physical examination was normal. What is the most likely diagnosis?
- A) Adenocarcinoma
- B) Squamous cell carcinoma
- C) Pleomorphic adenoma
- D) Warthin's tumour
- E) Mucoepidermoid carcinoma

ANSWER: C

- 47. Which of the following best describes primary Hyperparathyroidism?
- A) Elevated PTH & low calcium
- B) Elevated phosphate & high PTH
- C) Elevated chloride & calcium
- D) Elevated PTH & magnesium
- E) Elevated calcium & PTH

ANSWER: E

- 48. When should feeding be started after thyroid surgery?
- A) One hour after surgery
- B) 12 hours after surgery
- C) 24 hours after surgery
- D) When the patient passes flatus or has bowel sounds
- E) On full recovery

ANSWER: E

- 49. All are features of salivary Warthin's tumour (papillary cystadenoma lymphomatosum) EXCEPT:
- A) More common in males
- B) Always in Parotid gland
- C) Bilateral in 10 % of cases
- D) It transforms into a malignant tumour in 20% of cases
- E) It is related to smoking

ANSWER: D

- 50. All of the following are clinical findings of Addison's disease EXCEPT:
- A) Weakness
- B) Intolerance to stress
- C) generalized oedema
- D) Irritability & restlessness
- E) Hyperpigmentation of the skin

ANSWER: C

- 51. Anxiety, tremor, & palpitations seen in patients with insulinoma are usually due to:
- A) Hypoglycaemia
- B) High catecholamines
- C) High glucagon
- D) High growth hormone
- E) High cortisol

ANSWER: B

- **52.** Psammoma bodies are typically found in which of the following thyroid cancers?
- A) Papillary
- B) Follicular
- C) Medullary
- D) Anaplastic
- E) Lymphoma

53. Congo red stain is used in histopathological diagnosis of which thyroid tumours?

- A) Papillary thyroid tumour
- B) Medullary thyroid tumour
- C) Follicular thyroid tumour
- D) Anaplastic thyroid tumour
- E) Thyroid lymphoma

ANSWER: B

54. All of the following may be found as part of MEN 1 (multiple endocrine neoplasia) syndrome EXCEPT:

- A) Gastrinoma
- B) Facial angiofibroma
- C) Parathyroid hyperplasia
- D) Pituitary adenoma
- E) Pheochromocytoma

ANSWER: E

55. Regarding carcinoid tumours, all of the following are true EXCEPT:

- A) They are neuroendocrine tumours
- B) Carcinoid tumours arising in the appendix are usually malignant
- C) They are found as part of the MEN 1 syndrome
- D) The carcinoid syndrome is usually due to the release 5-hydroxy-indoleacetic acid
- E) Carcinoid syndrome is commonly associated with tumours arising in bronchus

ANSWER: E

56. A 35-year-old woman with epigastric pain, which did not improve on proton pump inhibitors, is found to have a non-healing pyloric channel ulcer on upper endoscopy. Her serum calcium level is 12 mg/dL. What is the most likely diagnosis?

- A) WDHA syndrome
- B) Zollinger-Ellison syndrome
- C) MEN 1
- D) MEN 2B
- E) MEN 2A

ANSWER: C

57. The term plunging ranula refers to which clinical entity:

- A) A serous cyst originating from the parotid gland that is potentially malignant
- B) A mucous retention cyst originating from the submandibular & sublingual glands that reaches the neck
- C) A benign salivary mass involving the parotid & submandibular glands
- D) A malignant congenital salivary mass arising from the submandibular gland
- E) A midline neck mass which moves on tongue protrusion

ANSWER: B

58. Indications for operation in a patient with primary hyperparathyroidism include all of the following EXCEPT:

- A) A substantial decline in renal function
- B) A substantial decline in bone mass
- C) Nephrolithiasis
- D) Age older than 60
- E) Depression & fatigue

ANSWER: D

59. Elevation of serum C-peptide is useful for diagnosing which of the following neuroendocrine tumours?

- A) Glucagonoma
- B) VIPoma
- C) Somatostatinoma
- D) Insulinoma
- E) Gastrinoma

ANSWER: D

60. Which of the following is true regarding salivary glands?

- A) Mucoepidermoid is the most common malignant tumour
- B) Most of the parotid swellings are non-neoplastic
- C) Pleomorphic adenoma is the most common benign neoplasm of the salivary glands in children
- D) Sonography is the gold standard in the evaluation of a parotid mass
- E) Adenoid cystic carcinoma has a good prognosis

61. A 22-year-old lady came to the clinic complaining of palpitations & shortness of breath. Her workup revealed that she is hypertensive & hypokalemic. Imaging showed bilateral masses on adrenals. You suspect that she has primary hyperaldosteronism. What is the best next step?

- A) FNA
- B) Bilateral adrenalectomy
- C) MIBG
- D) Venous sampling
- E) Bilateral radiotherapy

ANSWER: D

- 62. Which of the following is true regarding medullary thyroid carcinoma?
- A) It is related to irradiation
- B) 75% of cases are sporadic
- C) It arises from follicular cells of the thyroid
- D) It is sensitive to RAI (radioactive iodine therapy)
- E) Familial cases are positive for B-Raf mutation

ANSWER: B

- 63. Psammoma bodies are associated with which type of thyroid cancer?
- A) Papillary carcinoma
- B) Follicular carcinoma
- C) Medullary carcinoma
- D) Anaplastic carcinoma
- E) Fibrolymphovascular tumours

- 64. A 50-year-old male with a posterior neck lymph node enlargement of a few weeks duration. The history was inconclusive for malignancy or URT infection. Physical examination revealed a red, tender, enlarged lymph node. What is the most appropriate next step?
- A) FNA biopsy
- B) Start on antibiotics & observe
- C) Excisional biopsy
- D) Incisional biopsy
- E) CT scan

- 65. The most precise diagnostic screening procedure for differentiating benign thyroid nodules from malignant ones is:
- A) Fine-needle-aspiration biopsy (FNAB)
- B) Thyroid Radioactive iodine scan
- C) A very thorough history
- D) Thyroid ultrasonography
- E) Computerized tomographic scan (CT scan)

ANSWER: A

- 66. What is the most common site of extra-adrenal Pheochromocytoma?
- A) Abdomen
- B) Neck
- C) Mediastinum
- D) Pelvis
- E) Lung

ANSWER: A

- 67. Hemi-thyroidectomy is effective for which of the following?
- A) Anaplastic carcinoma
- B) Graves' disease
- C) Medullary carcinoma
- D) Follicular carcinoma
- E) Papillary carcinoma

ANSWER: D

- 68. A 31-year-old female came to the clinic complaining of recurrent submandibular swelling upon eating for 5 months. On examination, it was tender. What is the most likely diagnosis?
- A) Sialolithiasis
- B) Acute sialadenitis
- C) Adenoid cystic carcinoma
- D) Pleomorphic adenoma of the submandibular gland
- E) Hematoma

69. All of the following cause hypercalcemia EXCEPT:

- A) Sarcoidosis
- B) Medullary thyroid carcinoma
- C) Vitamin D toxicity
- D) Metastatic cancer
- E) Thiazide diuretics

ANSWER: B

70. A 49-year-old lady came to the clinic complaining of a swelling in the right parotid area. The history & examination were consistent with facial nerve palsy of 6-month duration. What is the best next step?

- A) CT scan
- B) MRI to localize the facial nerve
- C) FNA biopsy
- D) Incisional biopsy
- E) Sonography

ANSWER: C

71. What is the mechanism of orthostatic hypotension in Pheochromocytoma?

- A) Increased heart rate
- B) Decreased contractility
- C) Arrhythmia
- D) Decreased venous return
- E) Increased arterial vascular tone

ANSWER: D

72. A 50-year-old lady who has pancreatitis was found to have high parathyroid hormone. She doesn't have hypercalciuria. She had a sestamibi scan showing hyperactivity below the right thyroid lobe. What is the best next step?

- A) Exploration of all 4 parathyroid glands
- B) Excision of the single adenoma
- C) Hemi-thyroidectomy with exploration
- D) Total thyroidectomy with right parathyroidectomy

- 73. Bilateral adrenal hyperplasia (bilateral Conn's of the adrenals) is treated with:
- A) Ketoconazole
- B) PTU
- C) Mitotane
- D) Fludrocortisone
- E) Spironolactone

ANSWER: E

- 74. Which of the adrenal masses supports hypokalemia?
- A)Conn's
- B) Cushing
- C) Pheochromocytoma
- D)Adrenal carcinoma

ANSWER: A

- 75. What is the malignancy that most commonly presents with unilateral cervical lymphadepathy in adults:
- A)Lymphoma
- B) leukemia
- C) squamous cell carcinoma of the head and neck
- D)Melanoma
- E) adenocarcinoma

ANSWER: C

- 76. What is the most common cause of cervical lymphadenopathy in children
- A) bacterial infection
- B) viral infection
- C) noninfectious inflammation
- D)lymphoma

77. What is the best diagnostic tool of cervical lymphadenopathy in children

- A)CT
- B)MRI
- C) US
- D)PET scan
- E) Thyroid US

ANSWER: C

78. which of the following diseases shows diffuse high iodine uptake in the thyroid gland?

- A) Graves' disease
- B) Hashimoto
- C) Thyroiditis

ANSWER: A

79. which of the following Least likely cause of acute hypocalcemia?

- A) Fluid resuscitation of shock
- B) massive blood transfusion
- C) Vitamin D deficient diets
- D)Acute pancreatitis

ANSWER: C

80. Medullary thyroid carcinoma most likely associated with?

- A)MEN1
- B) MEN2A
- C) FAP

81. Most aggressive genetic mutation associated with papillary thyroid carcinoma?

A)BRAF V600E

B)H-RAS

C) K-RAS

D)RET/PTC

E) PAX8/PPAR-Y

ANSWER: A

82. Most common parotid tumor in young age?

- A)pleomorphic carcinoma
- B) Adenoid cystic carcinoma
- C) Acinic cell carcinoma
- D)Mucoepidermoid carcinoma
- E) Warthin Tumor

ANSWER: D

- 83. Which of the following is not an indication of surgery of an adrenal tumor:
- A)25% washout
- B)<5 Hu on specimen
- C) Secreting tumor
- D)Increase in size in two images
- E) Size > 6 cm

ANSWER: B

84. Which of the following antibodies is most likely found in Hashimoto thyroiditis?

- A) Antithyroglobulin
- B) Anti TPO
- C) TSH receptor Ab
- D)Anti sodium iodide symporter

85. The best preoperative assessment of highly suspicious thyroid nodule is? A)US B)FNA C)PET D)RAI E)CT	
ANSWER: B	
86. Newly discovered thyroid nodule, what is the best initial test? A)US B)FNA C)CT D)MRI	
ANSWER: A	
87. Most of the blood supply of the parathyroid is from which artery?	
ANSWER : Inferior thyroid artery.	
88. Management of a non-functioning Bethesda 4 thyroid nodule?	
ANSWER : Lobectomy.	

89. What is the preferred site for re-implantation of parathyroid tissue after performing parathyroidectomy?

ANSWER: Forearm

90. Which of the following is a sign of insulinoma?

ANSWER: Change in activity

91. You performed a total thyroidectomy to a 56-year-old female patient for thyroid cancer. After the surgery, she developed hoarseness of voice. When should you examine the recurrent laryngeal nerve to check for permanent injury?

ANSWER: After 6 months

92. Which isotope of iodine is used for the treatment of thyroid disease?

ANSWER: I 131

93. Which of the following conditions is associated with thyroid lymphoma?

ANSWER: Hashimoto's thyroiditis

94. What is the treatment of the thyrotoxic state of Hashimoto's thyroiditis?

ANSWER: B- blockers

95. The prognosis of which of the following parotid tumors is dependent on the histologic features of the tumor?

ANSWER: Mucoepidermoid carcinoma

96. Wrong about NET:

ANSWER: Most NETs causes carcinoid syndrome

اللهم سلم غزة وأهلها من كل سوء وشر,اللهم انصرهم وثبت أقدامهم وكن لهم ناصرًا ومعينًا

لا تنسوني من صالح دعائكم

Malek Abu Rahma

The End Good Luck