

Endocrine lab exam

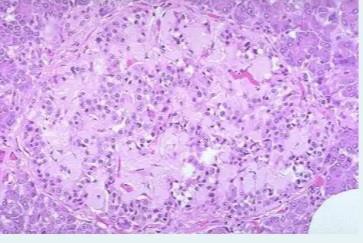
دفعة نبض 2019

1)A 72-year-old woman with presents with abdominal pain. Physical examination reveals neuromuscular weakness and hypertension. Laboratory studies show markedly elevated levels of PTH and Ca. A surgical exploration of the patient's neck demonstrates four symmetrically enlarged parathyroid glands. This patient's endocrinopathy caused by which of the following underlying disorders

1. **Chronic liver disease**
2. **Parathyroid hyperplasia**
3. **Insulin deficiency**
4. **Renal insufficiency**
5. **Parathyroid adenoma**



Question 2 : What do you call the material deposited on the islets of Langerhans in this section from the pancreas?



:Select one

A. Atherosclerosis

b. Hyaline

C. Dystrophic calcification

d. Amyloid

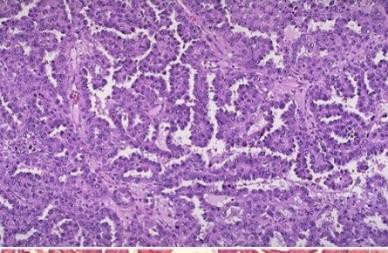
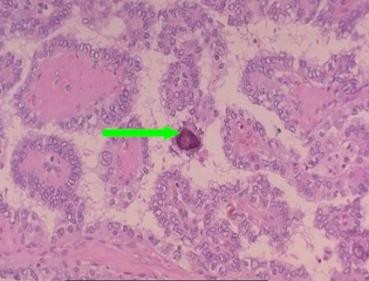
e. Microorganisms

quastion 3: What is the labelled structure

1. **Left posterior division of superior thyroid artery**
2. **Left anterior division of superior thyroid artery**
3. **Right posterior division of superior thyroid artery**
4. **Right anterior division of superior thyroid artery**
5. **Thyroid gland**

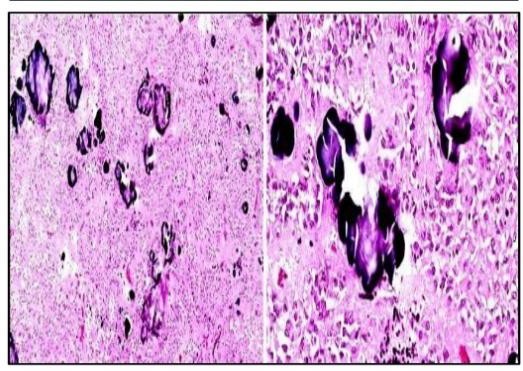


Quastion 4:A 32-year-old woman presents with a solitary, nontender, firm nodule on the left side of her neck. Thyroid function tests are within normal limits. A fine-needle biopsy reveals malignant cells. The tumor is excised and examined by light microscopy (shown in the image). What is the appropriate management for this lesions



1. **Total thyroidectomy:**
2. **Radiological investigation for bone and lung metastasis**
3. **Lobectomy**
4. **Only lymph node dissection**
5. **Hemithyroidectomy**

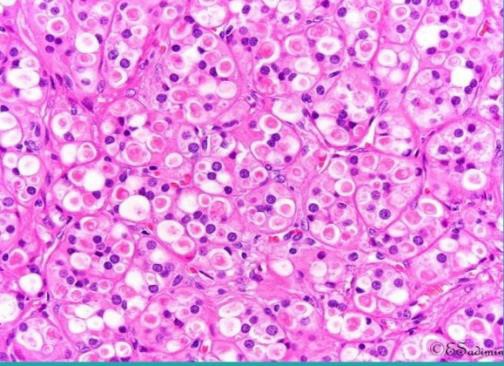
Quation 5: The pointed structure present in



1. **Pituitary gland**
2. **Suprarenal gland**
3. **Parathyroid gland**
4. **Pineal body e.cerebral cortex**

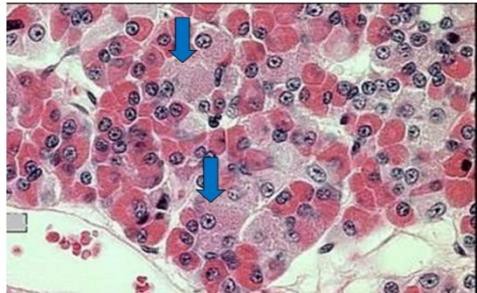
Quastion 6:what is the medication responsible for these spherical eosinophilic cytoplasmic

:inclusions seen commonly in this tumor



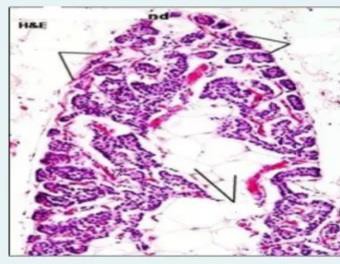
1. **Spironolactone**
2. **Propranolol**
3. **Furosemide**
4. **Dexamethasone**
5. **Aspirin**

Quastion 7: The TRUE statement for the pointed cell is



1. **Constitute 37%**
2. **Secrete ACTH**
3. **Secrete prolactin**
4. **Secrete growth hormone**
5. **Small in size**

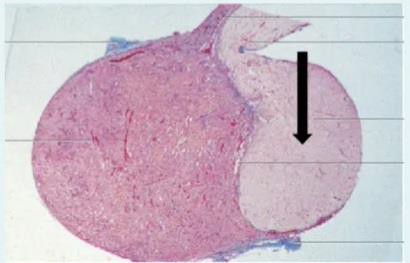
Question8: identify the tissue?



a.Yellow bone marrow

1. **Pineal gland in old age**
2. **Parathyroid in young**
3. **Parathyroid in old age**
4. **Thymus in old age**

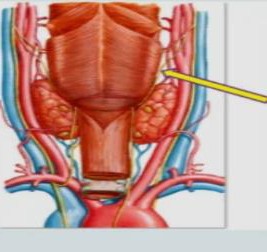
Quastion9:The TRUE statement for the cell present in the pointed are



**:**

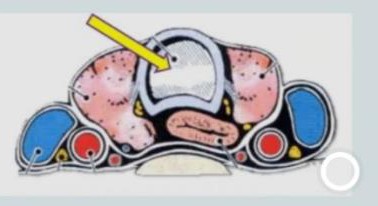
a.small glial cells of posterior pituitary

1. **Secretory cells present in pars nervosa**
2. **Called astrocytes .a**
3. **Multipolar nerve cells**
4. **Modified neuronsquestion**

:Quastion 10 What is the labelled structure

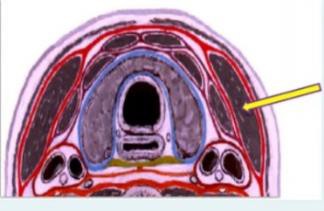
1. **Inferior constrictor muscles of pharynx**
2. **Superior laryngeal nerve**
3. **Internal laryngeal nerve**
4. **External laryngeal nerve**
5. **Superior thyroid artery**

?quastion 11 :What is the labelled structure?



1. **Isthmus of thyroid gland**
2. **Esophagus**
3. **Lobe of thyroid gland**
4. **Larynx**
5. **Trachea**

quation 12 What is the labelled muscle



1. **Omohyoid**
2. **Sternohyoid**
3. **Sternomastoid**
4. **Platysma**
5. **Sternothyroid**

**.**

:What is the material responsible for the usual yellowish color of these tumor



1. **Uric acid**
2. **Bilirubin**
3. **Lipid**
4. **Dystrophic calcification**
5. **Protein**

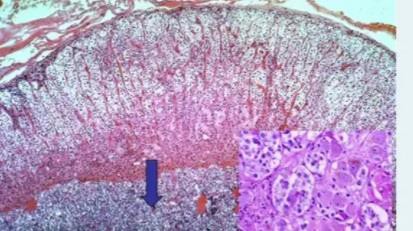
question 14:One of the following is not usually associated with this morphologic change in the

:adrenal gland?



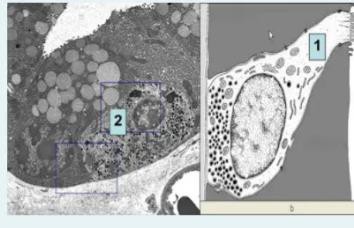
1. **Cushing disease**
2. **Contralateral adrenal carcinoma**
3. **latrogenic administration of high dose corticosteroids**
4. **Contralateral adrenal carcinoma**
5. **Contralateral adrenal hyperplasia**

Quastion 15: the pointed area secrete?



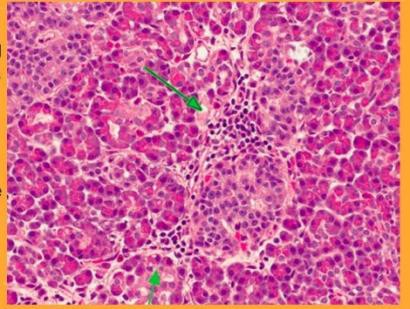
1. **Adrenaline and noradrenaline**
2. **Melatonin**
3. **Parathyroid hormone**
4. **Melanocyte stimulating hormone**
5. **Glucagon**

:Quation 16 : the FALSE statement concerning the cell number (1) is



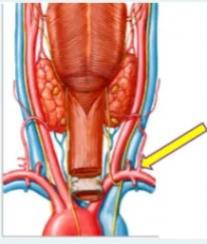
1. **They might show apical microvilli**
2. **They have paracrine or endocrine action**
3. **They have basal secretory granules**
4. **Their apices do not reach the lumen of viscera**
5. **They commonly present in the GIT**

Quastion 17: what is the main inflammatory cell type mainly involved in the insult you see in this photo

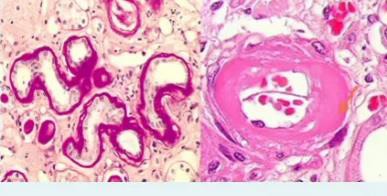


1. **Neutophiles**
2. **Eosinophiles**
3. **Macrophages**
4. **B-Lymphocytes**
5. **T-Lymphocyte**

:Quastion 18:!what is the labelled structure?

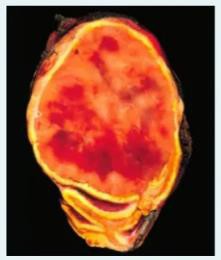


1. **Thyrocervical trunk**
2. **Subclavian artery**
3. **Recurrent laryngeal nerve**
4. **Inferior thyroid artery**
5. **Inferior thyroid vein**

:?Quastion 19:!One of the following is incorrect about these lesions

1. **These lesions are characteristic and specific for long standing diabetes mellitus**
2. **Diffuse thickening of basement membranes also involves renal tubules and nerves**
3. **Plasma proteins are deposited in the walls of injured arterioles thickening them**
4. **Microangiopathy is diffuse thickening of basement membranes of capillaries**
5. **Microangiopathy underlies the development of diabetic nephropathy and retinopathy**

:Quastion 20:what is the main cell component of this tumor



1. **Sustentacular cells**
2. **Glomerulosa cells**
3. **Fasciculata cells**
4. **Reticularis cells**
5. **Chromaffin cells**

:Quastion 21: The vein of the labelled structure drains into



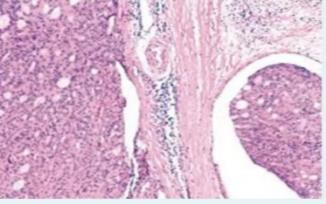
1. **Splenic vein**
2. **Inferior vena cava**
3. **Portal vein**
4. **Left renal vein**
5. **Right renal vein**

Quastion 22: A 9-month-old female shown in this picture, born with severe mental impairment

?along with umbilical hernia. What is most likely to produce these findings

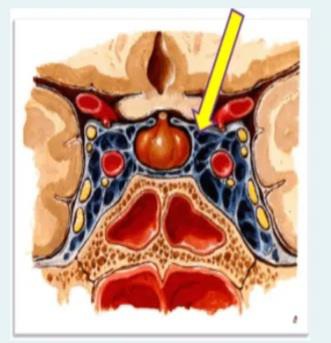
1. **Mutation in the RET proto-oncogene**
2. **Dietary deficiency of iodine**
3. **Antibodies against TSH receptor**
4. **Maternal deficiency in T4 in early pregnancy**
5. **Irradiation of the neck**

Quastion 23:A 45-year-old man presents with swelling in the anterior portion of his neck. Physical examination reveals an enlarged nodular thyroid. Thyroid function tests are within normal limits. A biopsy of this nodule shown in this image. X-rays demonstrate distant bony metastases. What is the most likely diagnosis



1. **Metastatic carcinoma**
2. **Anaplastic carcinoma**
3. **Follicular carcinoma**
4. **Medullary carcinoma**
5. **B-cell lymphoma**

:Quastion 24 :what is the labelled structure?



1. **Diaphragma sellae**
2. **Base of the skull**
3. **Hypothalamus**
4. **Sella turcica**
5. **Pituitary**

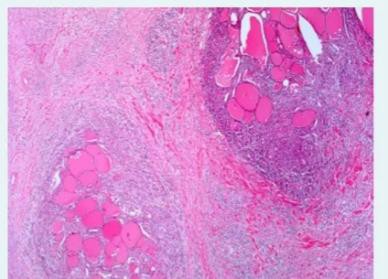
Quastion 25:Which of the following diseases commonly present with this finding?



1. **Waterhouse Friderichsen syndrome**
2. **Addison disease**
3. **Cushing disease**
4. **Diabetes mellitus**
5. **Adrenal crisis**

Quastin 26:A 33-year-old woman complains of swelling in the anterior portion of her neck, Physical examination reveals a stony, hard thyroid gland that is adherent to other neck structures. A thyroid

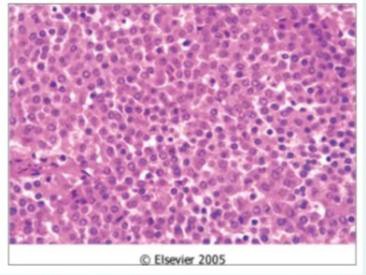
:?biopsy is shown in the image. What is the appropriate diagnosis?



1. **Riedel thyroiditis**
2. **Papillary thyroid carcinoma**
3. **Multinodular goiter**
4. **Graves hyperthyroidism**
5. **Follicular adenoma**

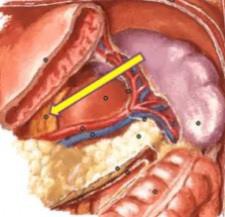
Quastion 27:A 35-year-old woman with a history of schizophrenia complains of headaches, visual disturbances, and irregular menses for 9. months. On physical examination the breasts are firm and tender. MRI shows enlargement of the anterior pituitary. A pituitary biopsy is shown in this picture.

:?Which of the following is true regarding the pituitary enlargement in this patient?



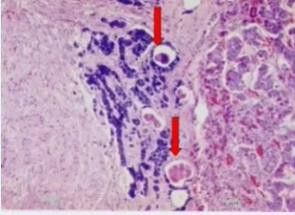
1. **The cut point between microadenoma and adenoma in size is metastases**
2. **the least common type is lactotroph adenoma**
3. **The cut point between microadenoma and adenoma in size is 1cm**
4. **The most common type is somatotroph adenoma**
5. **The cut point between microadenoma and adenoma in size is 1 mm**

:Quastion 28:The anterior relation of the labelled structure is



1. **Pyloric part of stomach**
2. **Fundus of the stomach**
3. **Body of stomach**
4. **Left crus of diaphragm**
5. **Head of pancreas**

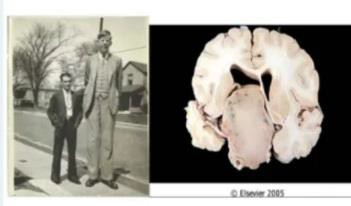
Quastion 29:the pointed structure secrete



1. **Calcitonin hormone**
2. **Melatonin hormone**
3. **Melanocyte stimulating hormone**
4. **T3 and T4**
5. **Thyroid stimulating hormone**

Quastion30:Which of the following are correct regarding the effects of increased levels of hormone

?regarding this macroscopic and clinical diagnosis



1. **Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the liver**
2. **Increased levels of growth hormone stimulate increased production of vasopressin from the adrenal glands**
3. **A. Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the pancreas**
4. **Increased levels of growth hormone stimulate increased production of insulin like growth factor one (IGF1) from the adrenal glands**
5. **Increased levels of growth hormone stimulate increased production of vasopressin from the liver**

?Quastion 31:One of the following is correct about the attached photo and this patient disease?



1. **Patients usually present with distal muscle weakness**
2. **Moon facies is part of the characteristic centripetal redistribution of adipose tissue**
3. **Collagen is a major component of the skin and responsible for its immunity**
4. **Striae are formed because the skin is thick and hypertrophied due to scaring**
5. **Anabolic effect effects of insulin resistance leads to loss of collagen**

Quastion32:What is the labelled structure?



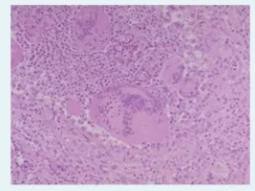
1. **Right superior thyroid vein**
2. **Middle thyroid vein**

C. Left superior thyroid vein

d. Right inferior thyroid vein

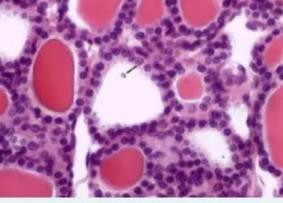
e. Left inferior thyroid vein

Quastion 33:A 43-year-old woman complains of low-grade fever and has a 3-day history of pain in her neck. Physical examination reveals slightly enlarged thyroid. A biopsy of the thyroid reveals the following microscopic picture (shown in the image). What is the causative agent for this diagnosis?

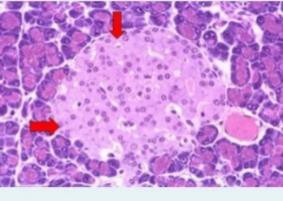


1. **Mutation in the RET proto-oncogene**
2. **Maternal deficiency in T4**
3. **Preceded by viral infection**
4. **Dietary deficiency of iodine**
5. **Irradiation of the neck**

?Quastion 34:The least numerous cell type in this organ

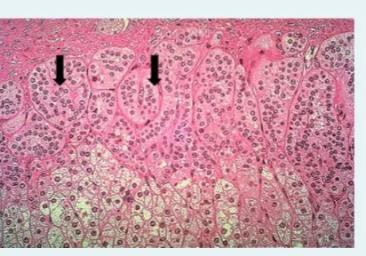


1. **Parathyroid cells**
2. **Follicular cells**
3. **Oxyphil cells**
4. **Interfollicular cells**
5. **Called clear cell**

:Quastion 35:The cell in the pointed area which secrete insulin is

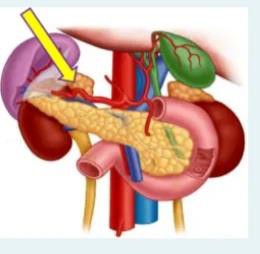
1. **Gamma cell**
2. **Delta cell**
3. **Parathyroid chief cells**
4. **Beta cell**
5. **Alpha cell**

Quastiom 36:The FALSE statement concerning the pointed zone?



1. **The cells are columnar in shape**
2. **The cells are steroid secreting cells**
3. **Secrete aldosterone hormone**
4. **Constitute 15%**
5. **Also called spongiocytes**

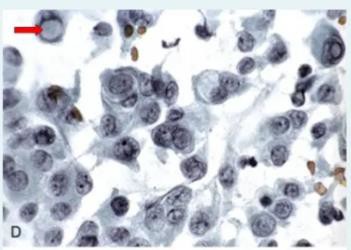
Quastion 37:What is the labelled structure?



1. **Duodenum**
2. **Right suprarenal gland**
3. **Tail of pancreas**
4. **Left suprarenal gland**
5. **Lienorenal ligament**

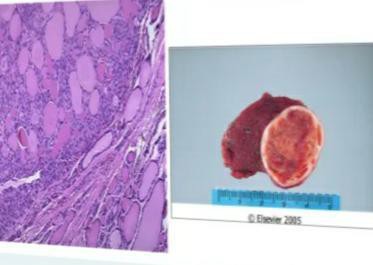
Quastion 38:A 32-year-old woman presents with a solitary, nontender, firm nodule on the left side of her neck. Thyroid function tests are within normal limits. A fine-needle biopsy reveals malignant cells as shown in this picture. Which of the following cytological feature is highlighted by the arrow

:and confirmed the diagnosis of this thyroid malignancy



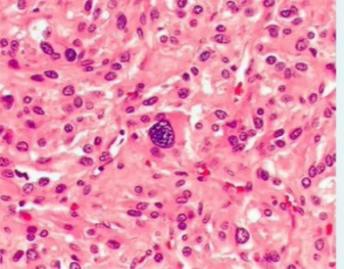
1. **Papillary thyroid carcinoma**
2. **Nuclear clearing**
3. **Nuclear grooving**
4. **Nuclear inclusion**
5. **Medullary carcinoma**

Quastion 39:A 33-year-old woman presents with a swelling in her neck. Physical examination reveals a solitary, nontender nodule of the thyroid gland measuring 2 cm in diameter. Thyroid function tests are within normal limits. The nodule does not accumulate lodine on thyroid scintiscan. A biopsy of the nodule is shown in the image. Which of the following is true regarding

?this lesion

1. **Intact capsule**
2. **Nuclear changes on FNA cytology**
3. **Capsular or vascular invasion**
4. **Evidence of lung metastases**
5. **Capsular invasion**

Qoastion40:One of the following is incorrect about the tumor seen in this photo ?



1. **50% of them are paragangliomas**
2. **Ventricular arrhythmias are one of the cardiac complications**
3. **Multifocal lesions require long-term medical treatment for hypertension**
4. **Tumor cells are compartmentalized into small nests by a rich vascular network**
5. **90% of patients present with hypertension**

**THE END**