



ENDOCRINE PATHOLOGY

TEST BANK



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DISEASES OF PITUTARY GLAND



Wrong about Sheehan syndrome – associated with anterior pituitary enlargement with increased vasculature

Patient having adenoma with severe headache ? Pituitary Apoplex

Top cause of endogenous Cushing syndrome - corticotroph pituitary adenoma



Which of the following is NOT a clinical manifestation of Cushing syndrome:

- a. Cutaneous striae.
- b. Hypertension.
- c. Truncal obesity.
- d. Hypoglycemia.
- e. Osteoporosis.

ANSWER: D



Which of the following is the most common cause of endogenous Cushing syndrome?

- a. Ectopic production of ACTH.**
- b. Adrenocortical carcinoma.**
- c. ACTH-producing pituitary adenoma (Cushing disease).**
- d. Primary adrenal hyperplasia.**
- e. Adrenocortical adenoma.**

ANSWER: C



The least common type of pituitary adenomas

- a. LH-Producing adenoma.**
- b. Somatotroph adenoma.**
- c. ACTH-producing adenoma.**
- d. TSH secreting adenoma.**
- e. Prolactinoma.**

ANSWER: D



Which of the following is NOT a feature of central diabetes insipidus?

- a. Characterized by polyuria.**
- b. Characterized by ADH deficiency.**
- c. Hyponatremia.**
- d. Can be caused by chronic inflammation of the pituitary gland and hypothalamus.**
- e. The urine shows inappropriate low specific gravity.**

ANSWER: C



All of the following are signs and symptoms of pituitary adenomas or carcinoma except:

- a.Cranial nerve palsies**
- b.Decrease intracranial pressure**
- c.Pituitary apoplexy**
- d.Sellar expansion**
- e.Seizures**

ANSWER: B



which of the following does not cause hyperprolactinemia?

- a. Pregnancy**
- b. High dose estrogen therapy**
- c. Reserpine**
- d. Dopamine**
- e. Stalk effect**

ANSWER: D



Sheehan syndrome is a complication of the following pituitary adenoma:

- a. ACTH secreting adenoma**
- b. TSH secreting adenoma**
- C. LH secreting adenoma**
- d. Prolactinoma**
- e. Somatotroph cell adenoma**

ANSWER: D



Which of the following is false about pituitary adenomas?

- a. Usually solitary (Single)**
- b. The cutoff point in the size between microadenomas and macroadenomas is 1 cm**
- c. Might be plurihormonal**
- d. The most common type is somatotroph adenomas**
- e. Might be non-secretory**

ANSWER: D



An X ray of a 55-year-old lady showed expansion of the Sella turcica with associated bony erosions. She complained of vision problems. The MOST COMMON cause of her symptoms is:

- A- Pituitary macroadenoma, Prolactinoma type**
- B- Pituitary microadenoma, prolactinoma type.**
- C- Prolactinoma that can be of any size.**
- D- Non-functioning pituitary macroadenoma**
- E- Non-functioning pituitary adenoma of any size.**

ANSWER: D



A 32-year-old pregnant lady delivered by a caesarean section. She lost 2 litres of blood during the operation and her systolic blood pressure dropped significantly. She developed hypothyroidism and adrenal insufficiency. Which of the following statements is CORRECT about her disease?

(The question describes Sheehan syndrome)

A- An X ray would show expansion of Sella turcica

b- Her symptoms are caused by ischemic necrosis of 50% of the anterior pituitary

C- The presence of a pre-existing large non-functioning pituitary adenoma makes her more vulnerable to develop hypopituitarism

D- Her symptoms are caused by haemorrhage within the anterior pituitary.

E- Her symptoms could've been better if bleeding of the same amount and duration occurred during pregnancy rather than during delivery

ANSWER: C

DISEASES OF THE PANCREAS



True about DM – Type 2 are usually obese and have a family history of the disease

Wrong about DM – type 2 has peripheral resistance which involves decreased glucose uptake by skeletal muscles and brain tissue





The most common cause of death in diabetic patients:

- a. Cerebral infarction.**
- b. Chronic renal failure.**
- c. Pulmonary edema.**
- d. Myocardial infarction.**
- e. Pulmonary infarction**

ANSWER: D



Which of the following is False about diabetes Mellitus type 2?

- a. Inflammation mediated by cytokines results in peripheral resistance.**
- b. Accounts for 80-90% of cases of diabetes.**
- c. Low levels of free fatty acids play a role in mediating insulin resistance.**
- d. Obesity is a risk factor for insulin resistance.**
- e. Characterized by B-cell dysfunction.**

ANSWER: C



Which of the following characterizes type I but not type II diabetes mellitus?

- a. Lack of insulin.**
- b. Polyuria and polydipsia.**
- c. Can usually be successfully managed by dietary control.**
- d. Hyperglycemia**

ANSWER: A



Regarding Diabetes mellitus which is false?

- a. Type 1 Diabetes mellitus happen due to Lack of insulin**
- b. Type 2 Diabetes mellitus happen due to Lack of insulin**
- c. Diabetes mellitus is a syndrome of disordered metabolism**
- d. Among Diabetes Signs; feeling Very thirsty**
- e. Diabetes mellitus could happen due to hereditary and environmental causes**

ANSWER: B



All the following are among the Chronic complications of Diabetes mellitus except:

- a. Strokes**
- b. Coronary heart disease**
- c. Renal failure**
- d. Diabetic ketoacidosis**
- e. Poor wound healing**

ANSWER: D



All the following are among the signs of Diabetes mellitus except:

- a. Feeling very thirsty**
- b. Feeling very active**
- c. Using the toilet often to urinate**
- d. High level of glucose in urine and in fasting blood**
- e. Constant hunger**

ANSWER: B



The most common cause of death in diabetic patients:

- a. Chronic renal failure**
- b. Hyperosmolar coma**
- c. Myocardial infarction**
- d. Diabetic ketoacidosis**
- e. Disseminated infections**

ANSWER: C



Which of the following about pathogenesis of type 1 diabetes is false?

- a. It is an autoimmune disease**
- b. Production of autoantibodies against insulin**
- c. Characterized by extensive clonal deletion of self-reactive T lymphocytes**
- d. Characterized by abnormalities in regulatory T lymphocytes**
- e. Production of autoantibodies against enzyme glutamic acid decarboxylase**

ANSWER: C



Diabetes mellitus signs & symptoms are summarized by the following EXCEPT :

- a. Very thirsty.**
- b. Feeling tired.**
- c. Using the toilet often to urinate.**
- d. Feeling full.**
- e. All of the above**

ANSWER: D



One of the following is INCORRECT regarding differences between type 1 and type 2 Diabetes Mellitus (DM):

A- In type 1 DM there is absolute insulin deficiency whereas in type 2 DM insulin levels can be normal.

B- In type 1 there is autoimmune destruction of the Islets of Langerhans, whereas in type2 there is dysfunction of the pancreatic Islets.

C- Insulin resistant is a feature of type 2 DM resulting in decreased glucose uptake by muscle and brain tissues

D- Free fatty acids play a major role in the pathogenesis of type 2 DM.

E- Type 1 occurs at a younger age group than type 2 DM.

ANSWER: C



The leading cause of death in diabetics is related to which of the following complications?

A- microangiopathy.

B- Femoral artery atherosclerosis.

C- Diabetic nephropathy

D- Hyaline arteriolosclerosis.

E- Coronary artery atherosclerosis

ANSWER: E



DISEASES OF ADRENAL GLAND





(Maybe Included)

The most common cause of chronic adrenocortical insufficiency (Addison disease)

- a. Autoimmune adrenalitis.**
- b. AIDS.**
- c. Tuberculosis.**
- d. Fungal infection.**
- e. Metastatic carcinoma.**

ANSWER: A



Which of the following is False about hyperaldosteronism :

- a. It causes hypertension.**
- b. Primary hyperaldosteronism is characterized by decrease renin levels.**
- c. It causes hypokalemia.**
- d. Secondary hyperaldosteronism can be caused by renal hypoperfusion.**
- e. The most common cause of primary hyperaldosteronism is adrenocortical carcinoma**

ANSWER: E



Which of the following is False about Hyperaldosteronism?

- a. Secondary hyperaldosteronism can be caused by renal artery stenosis**
- b. Secondary hyperaldosteronism is characterized by high renin**
- c. The most common cause of primary hyperaldosteronism is adrenocortical adenoma**
- d. The most common manifestation of hyperaldosteronism is hypertension**
- e. Primary hyperaldosteronism can be familial**

ANSWER: C



Which of the following statements is False?

- a. One cause of secondary diffuse hyperplasia in adrenal glands is Cushing disease**
- b. After exogenous administration of cortisol, the adrenal glands show bilateral diffuse hyperplasia**
- C. Cushing disease is ACTH dependent cause of Cushing syndrome**
- d. Primary adrenal hyperplasia may show micronodules or macronodules**
- e. Primary adrenal hyperplasia is ACTH independent cause of Cushing syndrome**

ANSWER: B



Which of the following is False about Hyperaldosteronism?

- a. Secondary hyperaldosteronism can be caused by renal artery stenosis**
- b. Secondary hyperaldosteronism is characterized by high renin**
- c. The most common cause of primary hyperaldosteronism is adrenocortical adenoma**
- d. The most common manifestation of hyperaldosteronism is hypertension**
- e. Primary hyperaldosteronism can be familial**

ANSWER: C



In which of the following causes of Cushing syndrome the adrenal glands are expected to be atrophic?

A- Iatrogenic Cushing syndrome,

B- Cushing disease

C- ACTH producing pituitary adenoma

D- Cushing syndrome occurring as a Paraneoplastic syndrome in a patient with lung small cell carcinoma

E- Nodular adrenal hyperplasia

ANSWER: A



MIXED QUESTION :

All the following endocrine neoplasms are matched correctly with the histological features that help in their recognition EXCEPT:

- A- Parathyroid adenoma and absence of fat.**
- B- Malignant Pheochromocytoma and metastatic spread.**
- C- Pituitary adenomas and polymorphic cellular appearance**
- D- Papillary thyroid carcinoma and psammoma bodies.**
- E- Medullary thyroid carcinoma and amyloid deposition**

ANSWER: C



DISEASES OF THYROID AND PARATHYROID GLANDS





Which of the following is most manifestation of thyroid diseases(MOST COMMON CAUSE OF HYPOTHYROIDISM)?

- a. Follicular adenoma.**
- b. Graves' disease.**
- c. Hashimoto thyroiditis.**
- d. Diffuse and multinodular goiter.**
- e. Papillary carcinoma.**

ANSWER: C



What is myxoedema (maybe)?

- a. Is a term used synonymously with severe hyper activity of adrenal gland.**
- b. A condition of severely stunted physical and mental growth due to untreated anemia.**
- c. A condition of increased blood pressure.**
- d. A condition of severely stunted physical and mental growth due to untreated congenital deficiency of thyroid hormones.**
- e. Used to describe a dermatological change that can occur in hypothyroidism.**

ANSWER: E



Which of the following thyroid carcinomas is associated with previous radiation therapy?

- a. Papillary carcinoma.
- b. Poorly differentiated thyroid carcinoma.
- c. Medullary carcinoma.
- d. Anaplastic carcinoma.
- e. Follicular carcinoma

ANSWER: A



Which of the following genes shows mutation in familial medullary carcinoma?

a. RET

b. RB

c. P63

d. RAS

e. P53

ANSWER: A



Which of the following is False about exophthalmos?

- a. It may lead to corneal injury.**
- b. One cause is inflammatory infiltration of the retroorbital tissue.**
- c. It is specific for Graves disease.**
- d. It is present in all cases of Graves' disease.**
- e. It persists or progresses after treatment of thyrotoxicosis**

ANSWER: D



Which of the following is False about primary hyperparathyroidism?

- a. Most commonly caused by parathyroid adenoma.**
- b. It is the most common cause of clinically apparent hypercalcemia.**
- c. It causes osteitis fibrosa cystica.**
- d. It can cause nephrocalcinosis.**
- e. Characterized by hypophosphatemia.**

ANSWER: B



Which of the following is a cause of thyrotoxicosis NOT associated with hyperthyroidism (thyroid hyper function) :

- a. Toxic follicular adenoma.**
- b. TSH producing pituitary adenoma.**
- c. Toxic multinodular goiter.**
- d. Thyroiditis.**
- e. Graves disease.**

ANSWER: D



Which of the following types of thyroiditis is caused viral infection?

- a. Subacute granulomatous thyroiditis (de-Quervain thyroiditis).**
- b. Palpable thyroiditis.**
- c. Subacute lymphocytic thyroiditis (Painless thyroiditis).**
- d. Chronic lymphocytic thyroiditis (Hashimoto thyroiditis).**
- e. Riedel thyroiditis.**

ANSWER: A



Hyperparathyroidism is characterized by ?

- a. Excessive production of PTH by one or more of hyperfunctioning parathyroid glands.**
- b. Not having a genetic factor involved.**
- c. Less production of PTH by one or more of hyperfunctioning parathyroid glands.**
- d. Increase in cortisol level.**
- e. All of the above**

ANSWER: A



The type of thyroiditis that might occur in postpartum period is:

- a. painless thyroiditis**
- b. sub-acute granulomatous thyroiditis**
- c. Hashimoto thyroiditis**
- d. Riedel's thyroiditis**
- e. palpation thyroiditis**

ANSWER: A



All of the following are features of Myxedema Except:

- a. Decreased sweating**
- b. Mental sluggishness**
- c. Diarrhea**
- d. Pale skin**
- e. Apathy**

ANSWER: C



Which of the following is False about Medullary thyroid carcinomas?

- a. Some familial cases are associated with MEN 1 syndrome**
- b. Multicentricity is common in familial cases**
- c. Are neuroendocrine tumors**
- d. Sporadic cases affect adults**
- e. They secrete calcitonin**

ANSWER: A



The most common cause of primary hyperparathyroidism is:

- a. Parathyroid carcinoma**
- b. Nodular parathyroid hyperplasia**
- c. Chronic renal failure**
- d. Diffuse parathyroid hyperplasia**
- e. Parathyroid adenoma**

ANSWER: E



Which of the following is false about Graves' disease?

- A. The serum levels of TSH binding inhibitor immunoglobulins might be high in some cases**
- B. Characterized by infiltrative ophthalmopathy disappears after treatment of thyrotoxicosis**
- C. Low TSH**
- D. Characterized by thyrotoxicosis in all cases**
- E. Characterized by diffuse iodine uptake**

ANSWER: B



Which of the following sentences is true?

- a. Insufficiency of thyroid hormones result in Primary hyperthyroidism**
- b. Cretinism is a condition of stunted mental growth due to untreated congenital deficiency of thyroid hormones**
- C. Myxedema is a term used with severe hyperthyroidism**
- d. Thionamides are the primary drugs used to increase thyroid hormone production**
- e. Cretinism is a condition of stunted mental growth due to untreated congenital increase of thyroid hormones**

ANSWER: B



Which of the following is False about thyroid follicular carcinomas?

- a. Is more frequent in iodine deficient regions**
- b. More common in women**
- c. Tend to metastasize through lymphatics**
- d. Are composed of small follicles**
- e. Might be widely invasive or minimally invasive**

ANSWER: C



A 47-year-old woman complained of disfiguring enlargement of the neck. On examination you felt several variably-sized nodules of the thyroid gland, some of which felt cystic. Which of the following is CORRECT regarding her disease?

A- The largest nodule is more likely to be a functional nodule.

B- Graves disease is the most likely diagnosis

C- If iodine scans show increased iodine uptake, then a pituitary TSH adenoma would be the most common cause

D- Iodine deficiency is a common cause of her illness

E- Malignant transformation is a common complication of her disease.

ANSWER: D



A 45-year-old woman presented with heat intolerance, diarrhoea and tremors. Iodine scans showed a single hot nodule. This patient can have which of the following signs?

- A- Wide staring gaze**
- B- Thick scaly skin patches**
- C- Exophthalmos**
- D- Coarse facial features**
- E- Wide staring gaze with associated exophthalmos**

ANSWER: A



Choose the INCORRECT statement regarding Hashimoto thyroiditis:

- A- Is the most common cause of hypothyroidism in the developed countries.**
- B- There is increased risk of developing a lymphoma**
- C- Follicular destruction early in the disease can result in hyperthyroidism**
- D- Apoptosis of follicular cells is induced by B lymphocytes.**
- E- It has a genetic predisposition**

ANSWER: D



Hurthle cells are:

A- large cells with eosinophilic nuclear inclusions.

B- Seen only in Hashimoto thyroiditis.

C- An indicator of poor prognosis if seen in a thyroid adenoma.

D- Capable of generating more ATP than normal follicular cells.

E- Morphologically similar cells are present in parathyroid adenomas but not in normal parathyroid glands.

ANSWER: D



A 30-year-old man was treated for an upper respiratory tract infection, after which he developed painful enlargement of the thyroid gland. Serologic examination didn't show any autoantibodies. Which of the following information is CORRECT about his illness?

A- Thyroid function can return to normal within 8 weeks.

B- Characterized histologically by lymphocytic infiltrate with associated Hurthle cells.

C- Granulomas are a common histologic feature and are caused by macrophages trying to phagocytose viral particles.

D- If untreated, there is a risk to develop a lymphoma.

E- Blood tests will reveal low white blood cell counts.

ANSWER: A



Which of the following thyroid diseases CANNOT be diagnosed by Fine needle aspiration (FNA)?

A- Papillary thyroid carcinoma

B- Hashimoto thyroiditis

C- Follicular carcinoma

D- Thyroid cyst

E- All diseases can be diagnosed by FNA

ANSWER: C



Which of the following situations best describes Graves disease?

A- A 44-year-old lady with diffuse bilateral thyroid enlargement, and high TSH.

B- A thyroid gland received in the lab showing cystic degeneration and colloid nodules.

C- A histology report describing diffusely enlarged gland with enlarged follicles lined by tall columnar epithelial cells.

D- A 66-year-old male with unilateral exophthalmos and diffusely enlarged thyroid gland. Exophthalmos in Graves is bilateral.

E- A patient with diffuse, symmetric enlargement of the thyroid gland that showed decreased iodine uptake

ANSWER: C



All the following endocrine neoplasms are matched correctly with the histological features that help in their recognition EXCEPT:

A- Parathyroid adenoma and absence of fat.

B- Malignant Pheochromocytoma and metastatic spread.

C- Pituitary adenomas and polymorphic cellular appearance

D- Papillary thyroid carcinoma and psammoma bodies.

E- Medullary thyroid carcinoma and amyloid deposition.

ANSWER: C



A 40-year-old male with a single thyroid nodule which, on histological examination, showed nuclear clearing, grooves and inclusions is more likely to have which of the following mutations?

- A- Overstimulation of PIK3CA**
- B- Loss-of-function mutations of PTEN**
- C- (2;3) translocation**
- D- Formation of a fusion gene involving PAX8**
- E- RET gene rearrangement.**

ANSWER: E



All of the following combinations regarding thyroid tumors are correct EXCEPT:

A- Anaplastic carcinoma and TP53 mutation.

B- Medullary carcinoma and calcitonin production

C- Follicular carcinoma and iodine deficiency

D- Anaplastic carcinoma and poor prognosis

E- papillary carcinoma and early hematogenous spread.

ANSWER: E



Which of the following is NOT a feature of primary Hyperparathyroidism:

A- Hypocalcemia

B- Renal stones

C- Osteitis fibrosa cystica

D- Increased risk of peptic ulcers

E- Metastatic calcifications

ANSWER: A



Not likely to be a hot nodule – medullary carcinoma

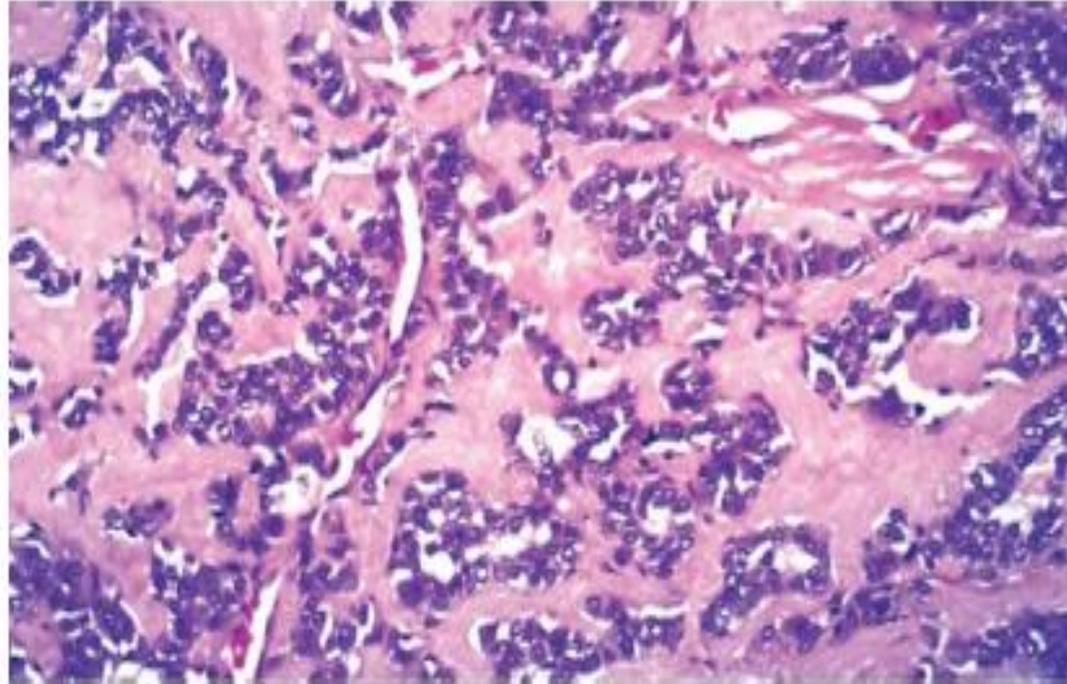
True about hyperparathyroidism – vitamin D deficiency can cause hyperparathyroidism

Picture of calcification – Psammoma bodies in papillary carcinoma



1) the following picture represent

- A- papillary carcinoma
- B- follicular carcinoma
- C- Anaplastic carcinoma
- D- medullary carcinoma



ANSWER: D



Which of the following is False about thyroid nodules?

- a. Hot nodules are more likely to be benign**
- b. Nodules in males are more likely to be neoplastic than are those in females**
- c. Nodules in very young and elderly people are more likely to be non- neoplastic**
- d. Solitary nodules are more likely to be neoplastic than are multiple nodules**
- e. History of radiation exposure is associated with increased risk of thyroid malignancy**

ANSWER: C



The most common cause of hypothyroidism where iodine levels are sufficient is:

- a. Riedel's thyroiditis**
- b. Sub-acute granulomatous thyroiditis**
- c. Palpation thyroiditis**
- d. Hashimoto thyroiditis**
- e. Painless thyroiditis**

ANSWER: D



Regarding parathyroid glands, which is true:

- a. PTH is secreted in response to high glucose**
- b. PTH is secreted in response of high T4**
- c. PTH is secreted from the thyroid glands in response to a low plasma concentration of ionized (free) calcium**
- d. PTH is secreted from the parathyroid glands in response to a high plasma concentration of ionized (free) calcium**
- e. PTH increases rates of dietary calcium absorption**

ANSWER: E



Which of the following is most manifestation of thyroid diseases?

- a. Follicular adenoma.**
- b. Graves's disease.**
- c. Hashimoto thyroiditis.**
- d. Diffuse and multinodular goiter.**
- e. Papillary carcinoma.**

ANSWER: D



Requires routine central lymph node dissection – **medullary carcinoma**

A woman with a unilateral enlargement in the thyroid, previous URT infection, increased lymphocyte count – **lymphocyte infiltrate with granulomatous reaction**

Not a symptom of hyperparathyroidism – **tetany**



Which of the following is a cause of thyrotoxicosis NOT associated with hyperthyroidism (thyroid hyper function) ?

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- b. TSH producing pituitary adenoma.**
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- d. Thyroiditis**
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ANSWER: D



Which of the following types of thyroiditis is caused viral infection?

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ANSWER: A

" اللَّهُمَّ بِصِيْرَةِ الْعَقْلِ، وَذَلَاقَةِ اللِّسَانِ، وَخِفَةِ الْبَيَانِ، وَعُلُوِّ الْهِمَّةِ، وَيَسْرَةِ الْمُهْمَةِ، وَاسْتِقَامَةِ الْقَلْبِ، وَفِكْرِ الْأَوَّلِينَ، وَعَزْمِهِمْ وَتَقْوَاهُمْ "

«اللَّهُمَّ عَلِّمَ إِبْرَاهِيمَ وَفَهَّمَ سُلَيْمَانَ وَيَقِينِ مُوسَى وَعِفَّةَ يُوسُفَ»

دعواتكم ❤️