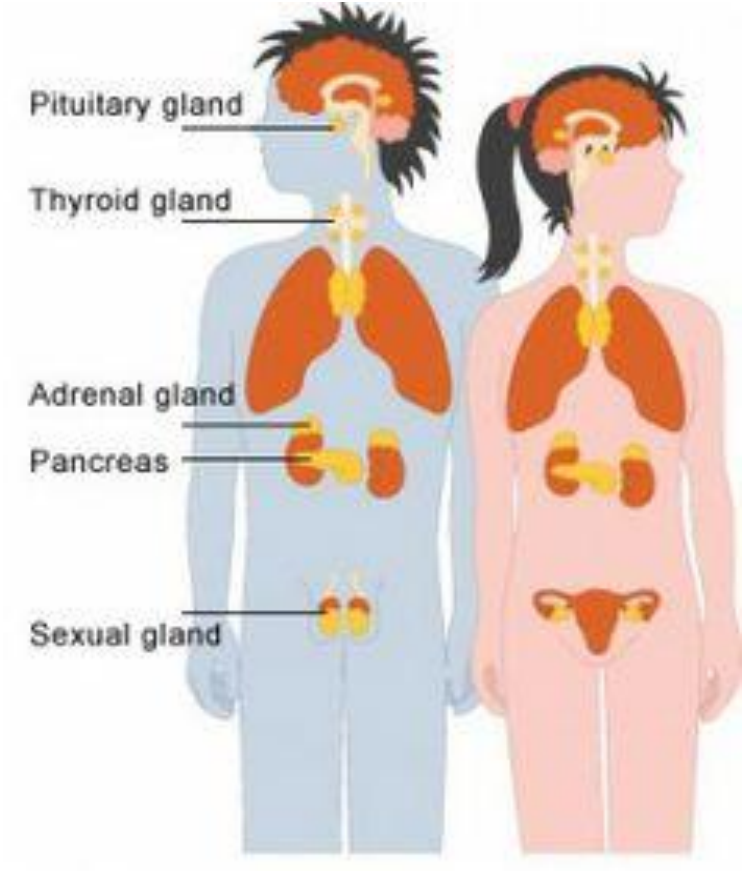

pituitary gland

Before going through the contents, make sure you check this CORRECTION FILE first

Pituitary gland

- The master of endocrine glands
- small oval structure 1 cm in diameter
- It doubles its size during pregnancy
- Lies in the middle cranial fossa
- protected in sella turcica (hypophyseal fossa) of body of sphenoid

Pituitary relations

superiorly	inferiorly	laterally	Anteriorly	posteriorly
Diaphragma sellae	Sphenoidal air sinuses	Cavernous sinus	Optic chiasm	Mammillary bodies

A fold of dura mater covers the pituitary gland & has an opening for passage of infundibulum (pituitary stalk) connecting the gland to hypothalamus.

Structures related laterally to the pituitary gland:
Passing through cavernous sinus:
6th CN
internal carotid artery
Lateral to the cavernous:
3rd, 4th and 5th(only maxillary & ophthalmic branches)

Those relations were mentioned by Snell & Drs of practical sessions

superior	inferior	lateral	posterior
• Diaphragma sellae) • Optic chiasm(anterior lobe only	• Sphenoid sinus • Sphenoid body (the bone itself)	• Cavernous sinus	• Dorsum sellae • Basilar artery • pons

SUBDIVISIONS OF PITUITARY GLAND	
Anterior Lobe (Adenohypophysis)	Posterior Lobe (Neurohypophysis)
The true gland	connected to hypothalamus through hypothalamo-hypophyseal tract
synthesizes & Secretes hormones	Stores hormones secreted by hypothalamic nuclei
Hormone-releasing & inhibiting factors produced by hypothalamus use Hypophyseal Portal System to reach the Anterior lobe of pituitary gland	receives a nerve supply from some of the hypothalamic nuclei (supraoptic & paraventricular) The axons of these nuclei convey their neurosecretion to the Posterior lobe of pituitary gland through Hypothalamo-Hypophyseal tract from where it passes into the blood stream.

BLOOD SUPPLY OF PITUITARY GLAND		
	Arteries	Veins
name	Superior & Inferior hypophyseal arteries	Hypophyseal veins
origin	Internal Carotid artery	Cavernous Sinuses
Superior hypophyseal	Inferior hypophyseal	
Supplies the infundibulum & forms the hypophyseal portal system	supplies posterior lobe	

The superior hypophyseal A. forms a capillary network from which vessels pass downward & form sinusoids into the anterior lobe of pituitary gland

MCQs

1.Which of these arteries gives the hypophyseal portal system?
A. Basilar artery
B. Superior hypophyseal artery
C. Inferior hypophyseal artery
D. External carotid artery

2.Which pituitary lobe depends mostly on the hypothalamo-hypophyseal tract for its function to be full filled ?
A. Antreior lobe
B. Posterior lobe
C. Adenohypophysis cerebri
D. Symphysis pubis

3.In case of pituitary adenoma involving only the anterior lobe, compressing on the optic chiasm. which of these symptoms would be mostly pronounced?
A. Visual disturbance
B. Sensory ataxia
C. Loss of near memory

4.Which of the meningeal layers forms the diaphragm sellae?
A. Dura matter
B. Pia matter
C. Arachnoid matter

5.During which period does the pituitary gland doubles its size?
A. Pregnancy
B. Lactation
C. Puberty
D. Prepuberty

6.which of the following sinuses lies inferiorly to the pituitary gland?
A. The frontal sinus
B. The maxillary sinus
C. Ethmoidal sinuses
D. The sphenoidal sinus

7.Conveing the hormone-releasing/inhibiting factors of the hypothalamus to the pituitary gland is the function of which of the following?
A. Cavernous sinus
B. Hypophyseal vein
C. Inferior hypophyseal artery
D. Hypophyseal portal system

THANK YOU FOR CHECKING OUR WORK

GOOD LUCK DOCTORS

key answers:

1.B
2.B
3.A
4.A
5.A
6.D
7.D

Done by:
خلود العنزي

For any question, correction or suggestion, don't hesitate to contact us on:
anatomyteam434@gmail.com