

Systems

Lab : 6

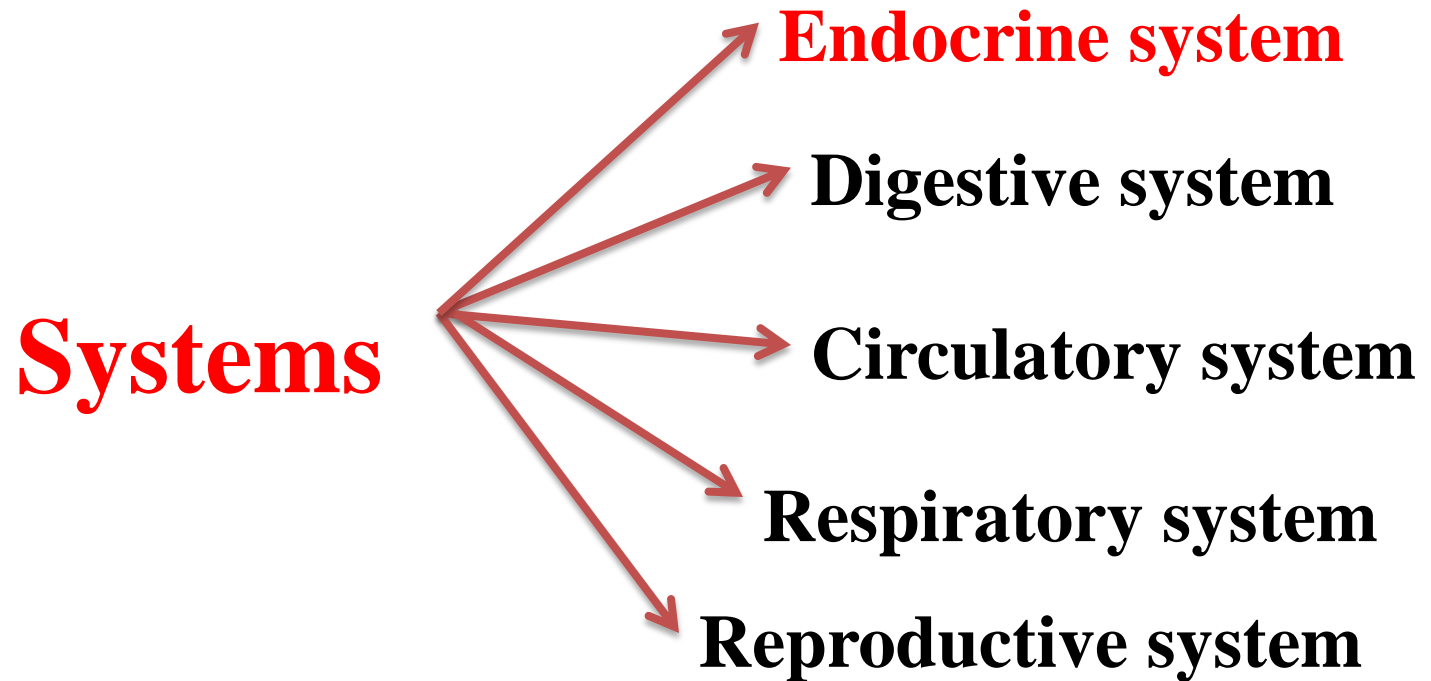
Stage : 1st

Course : 1st

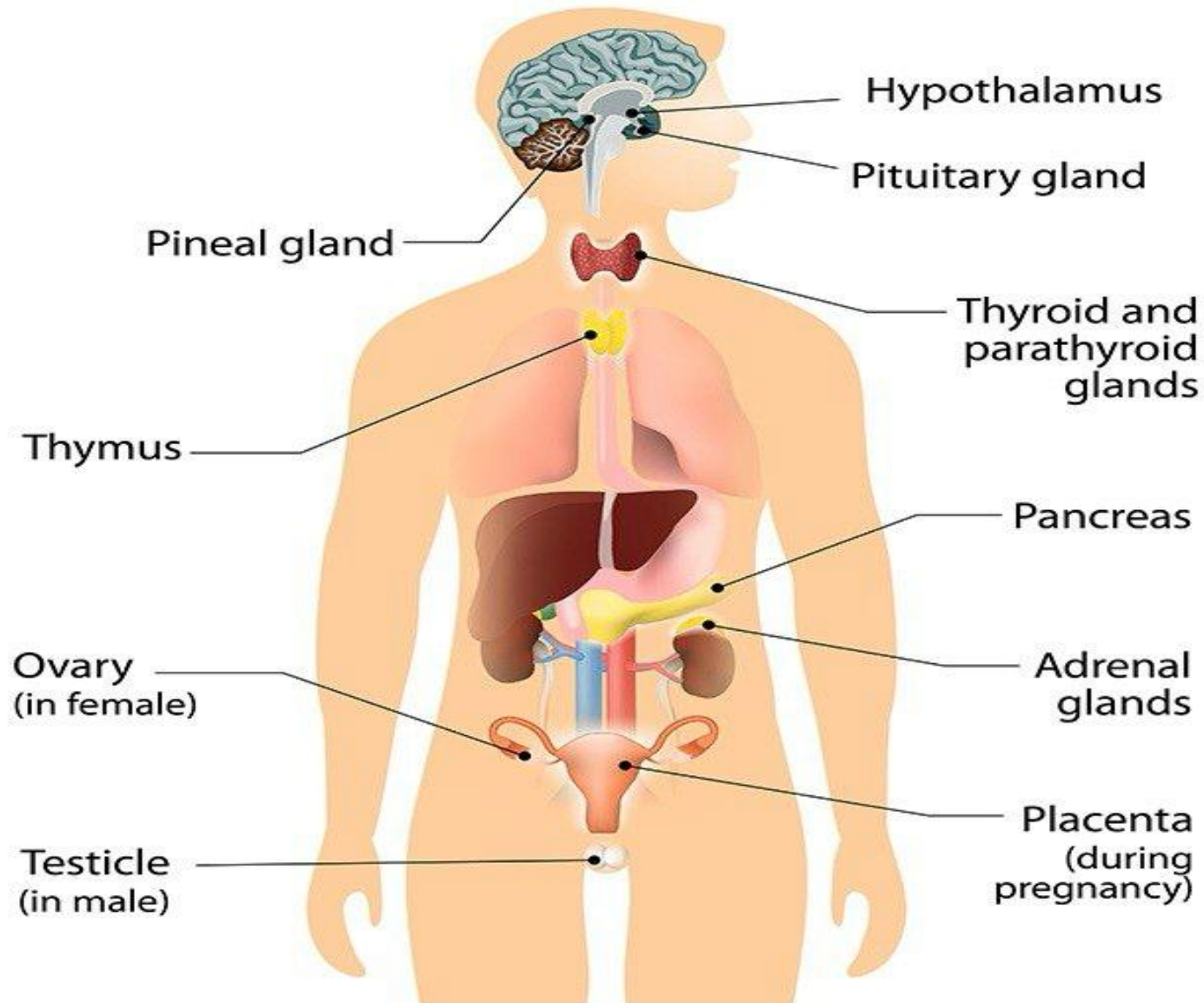
By Assistant lecturer

Huda Muhammed Muzher

Sarah Mussa Mahmood



Endocrine System



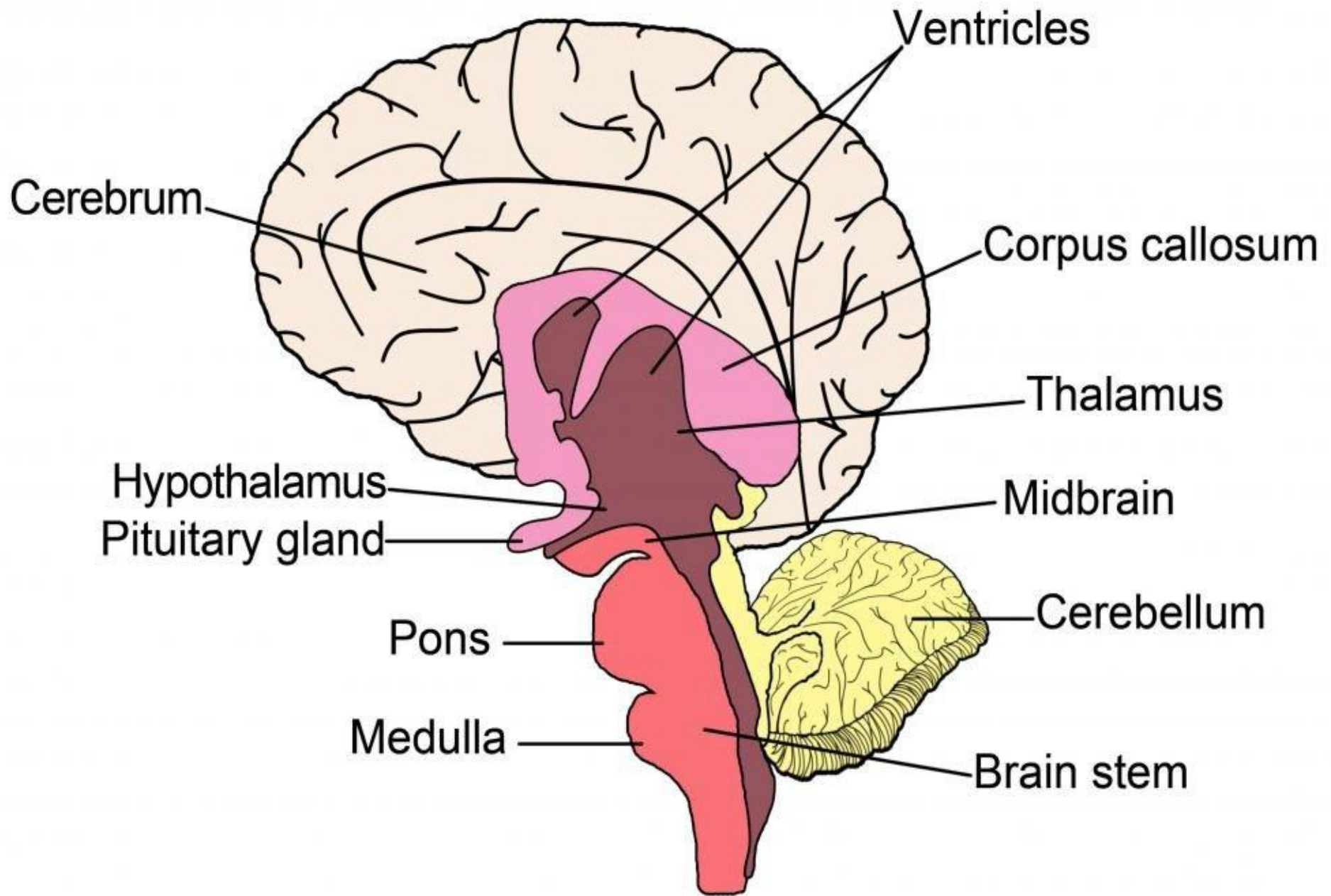
1- Hypothalamus

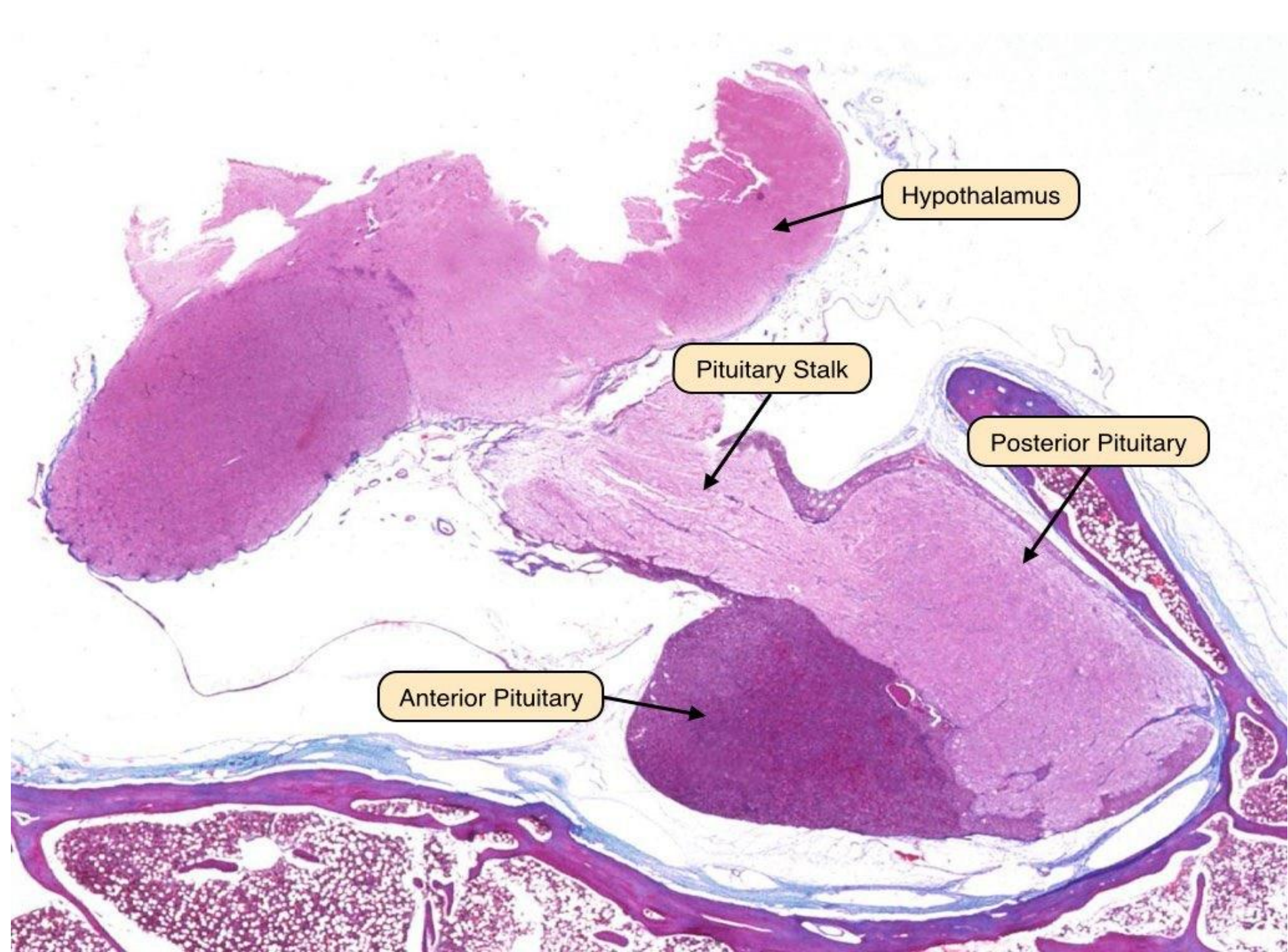
Location

in ventral brain above the pituitary gland and below ventricles

Hormones

1. Growth hormone releasing hormone (GHRH)
2. Gonadotropin-releasing hormone (GnRH)
3. Corticotropin-releasing hormone (CRH)
4. Thyrotropin-releasing hormone (TRH)
5. Dopamine
6. Oxytocin
7. Somatostatin





2- Thymus gland

Location

Behind sternum, below thyroid

Hormones

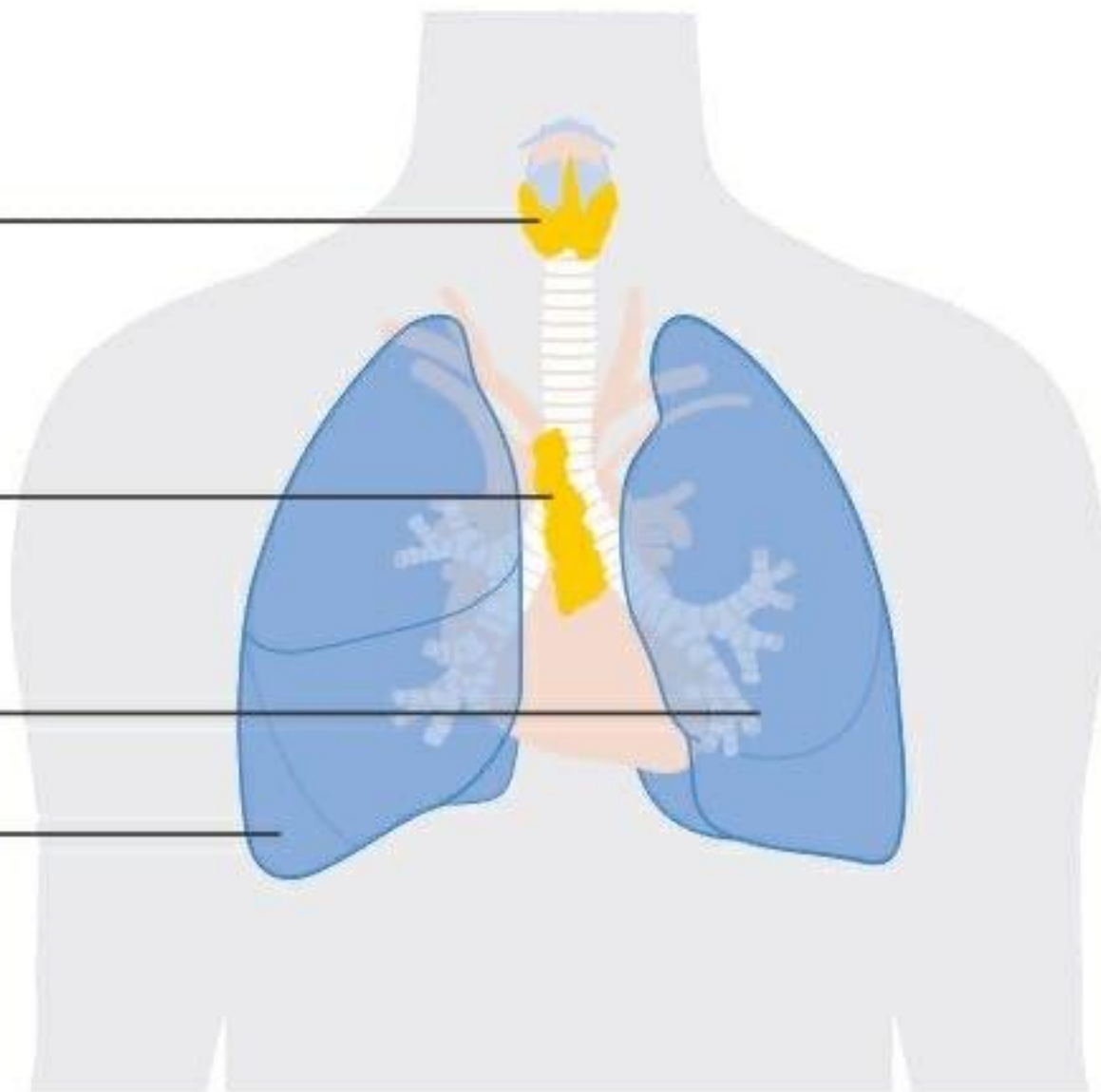
1. Thymosin
2. Thymopoietin
3. Thymulin

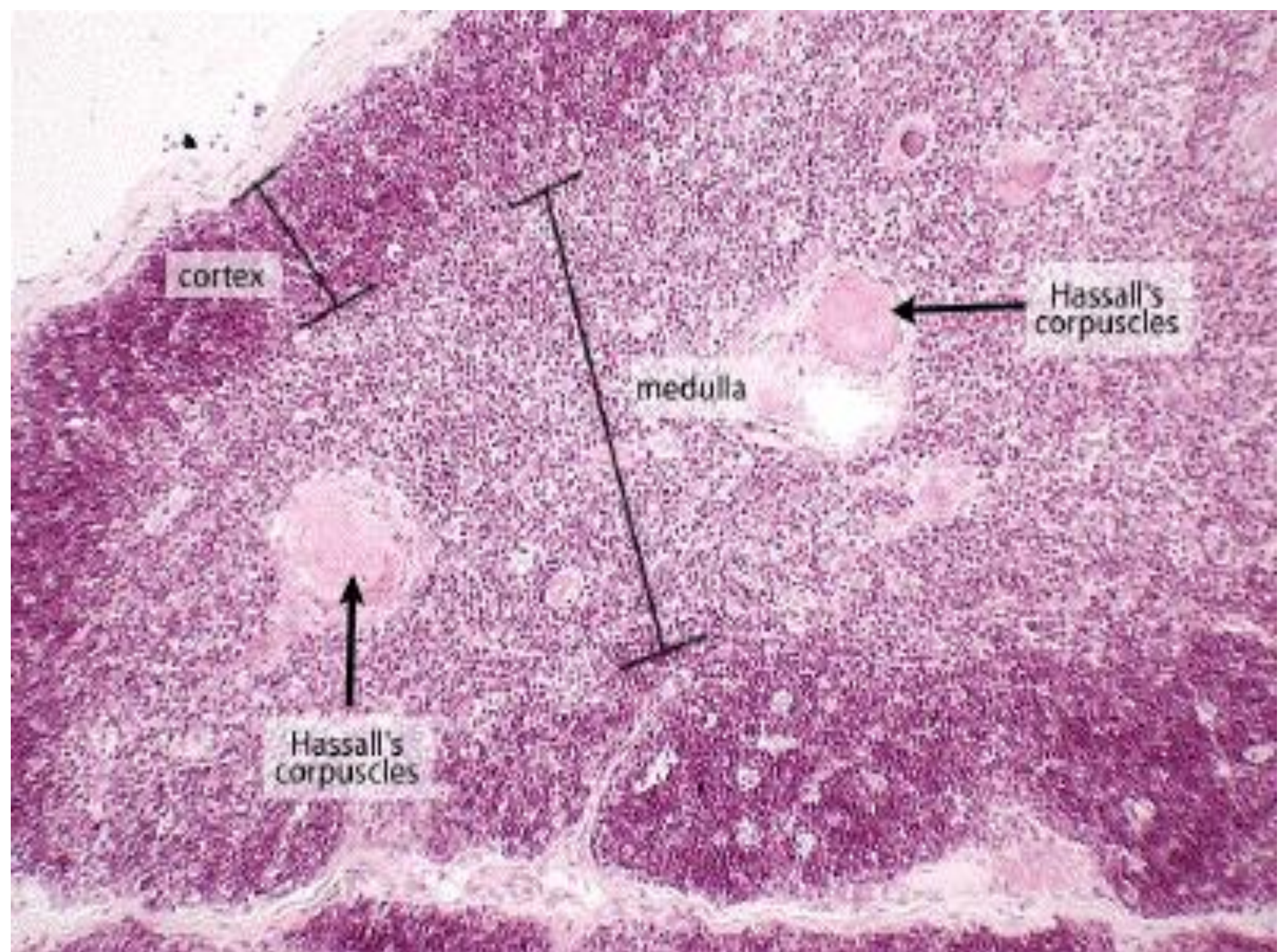
Thyroid

Thymus

Right lung

Left lung





3- Adrenal glands

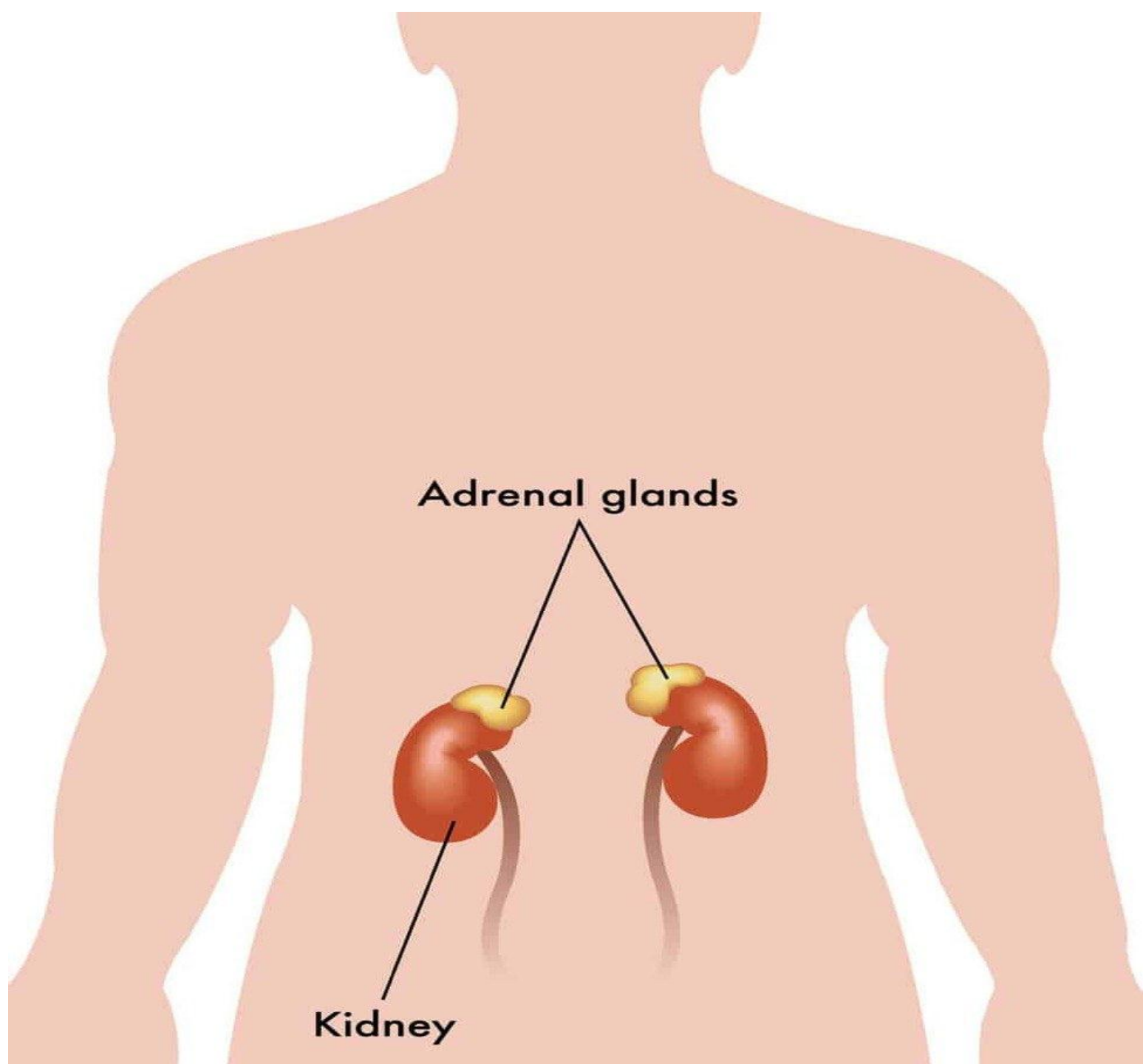
Also known as **suprarenal glands**.

Location

They are found above the kidneys.

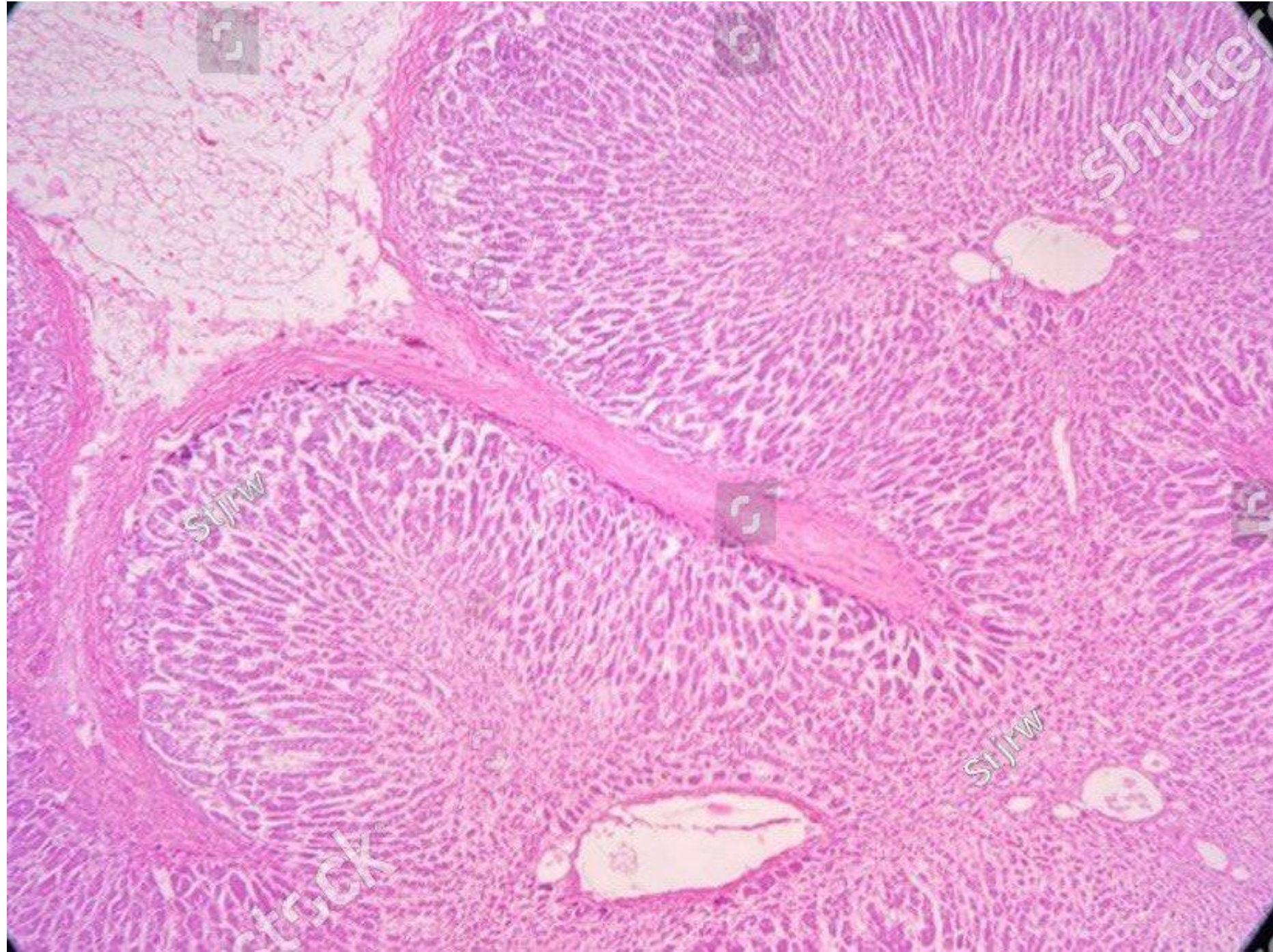
Hormones

Aldosterone, cortisol , androgens, estrogen, epinephrine (adrenaline) and Norepinephrine (noradrenaline) .



Adrenal glands

Kidney



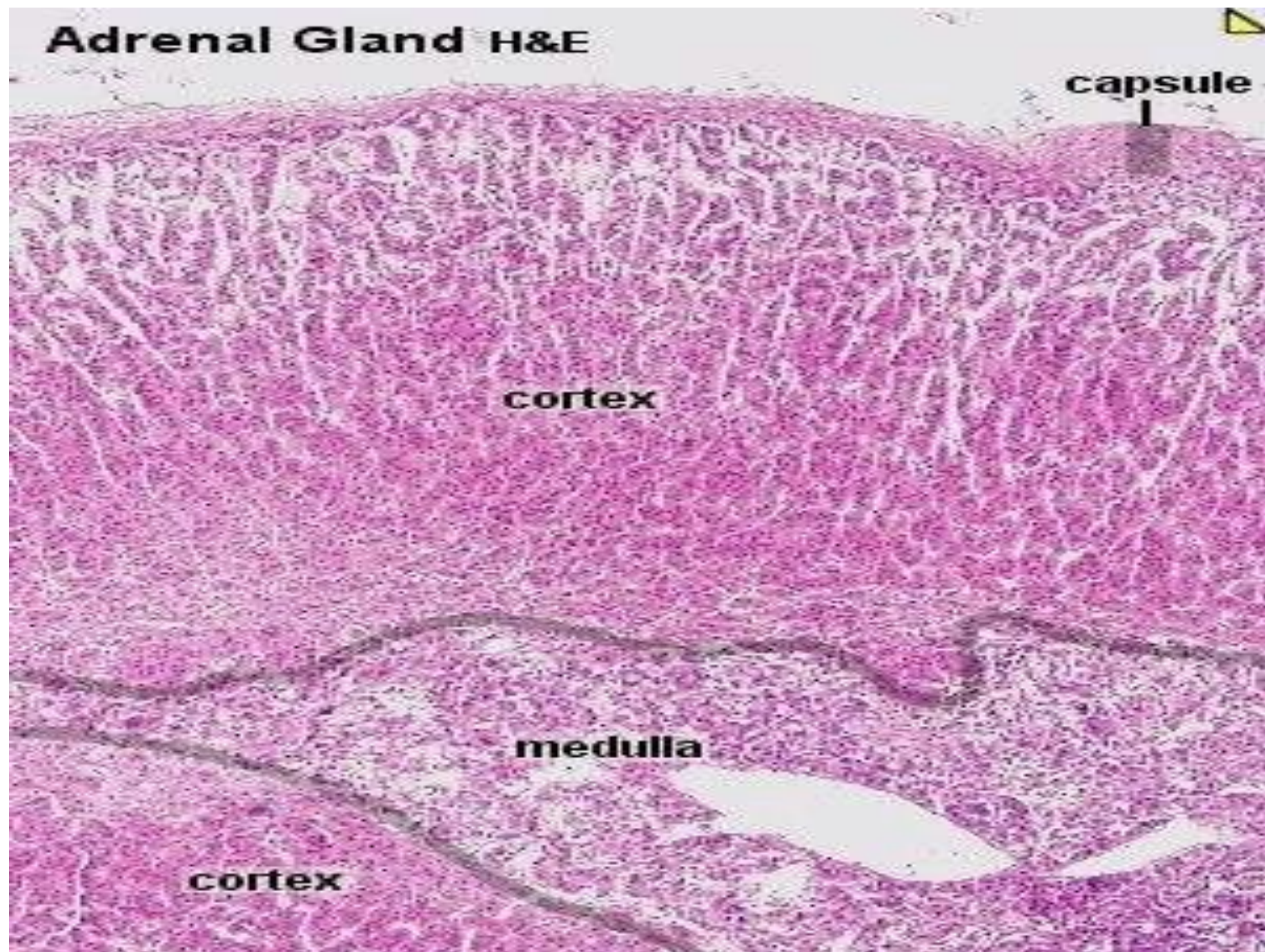
Adrenal Gland H&E

capsule

cortex

medulla

cortex



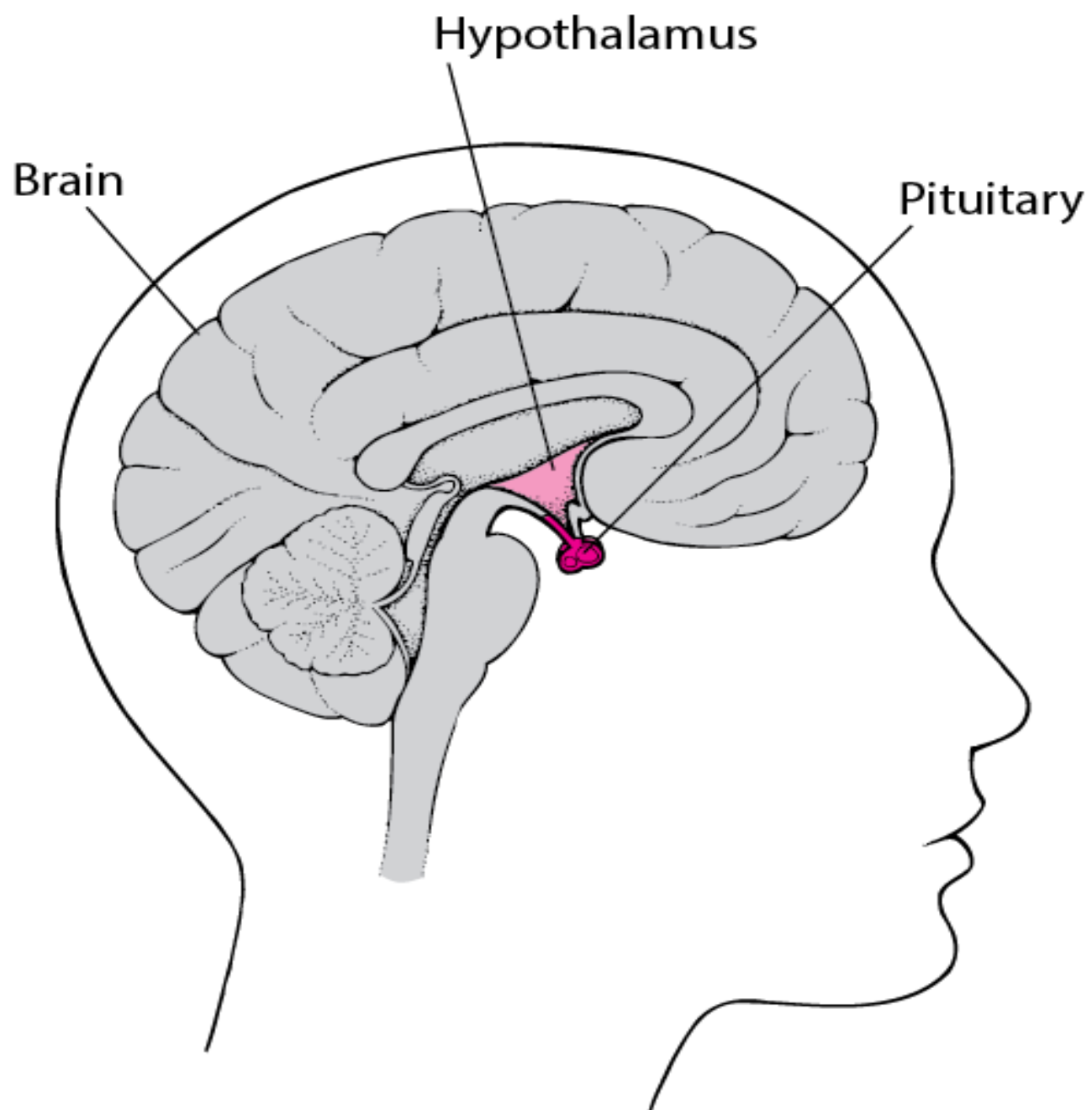
4- Pituitary gland

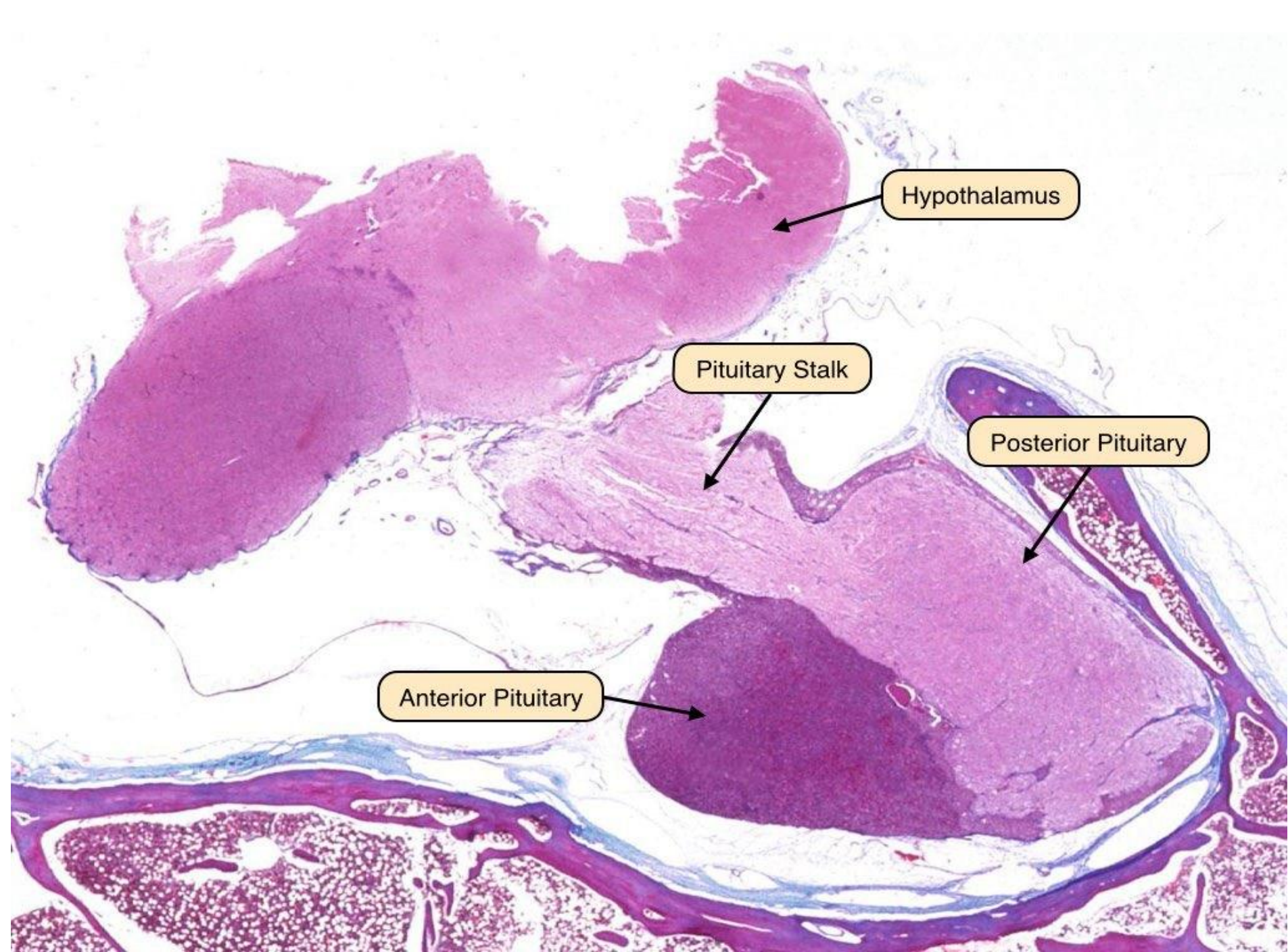
Location

Attached to a stalk (infundibulum) at base of hypothalamus

Hormones

Growth hormone , thyroid stimulating hormone (TSH), prolactin , adrenocorticotrophic hormone (ACTH), follicle stimulating hormone (FSH), luteinising hormone (LH)



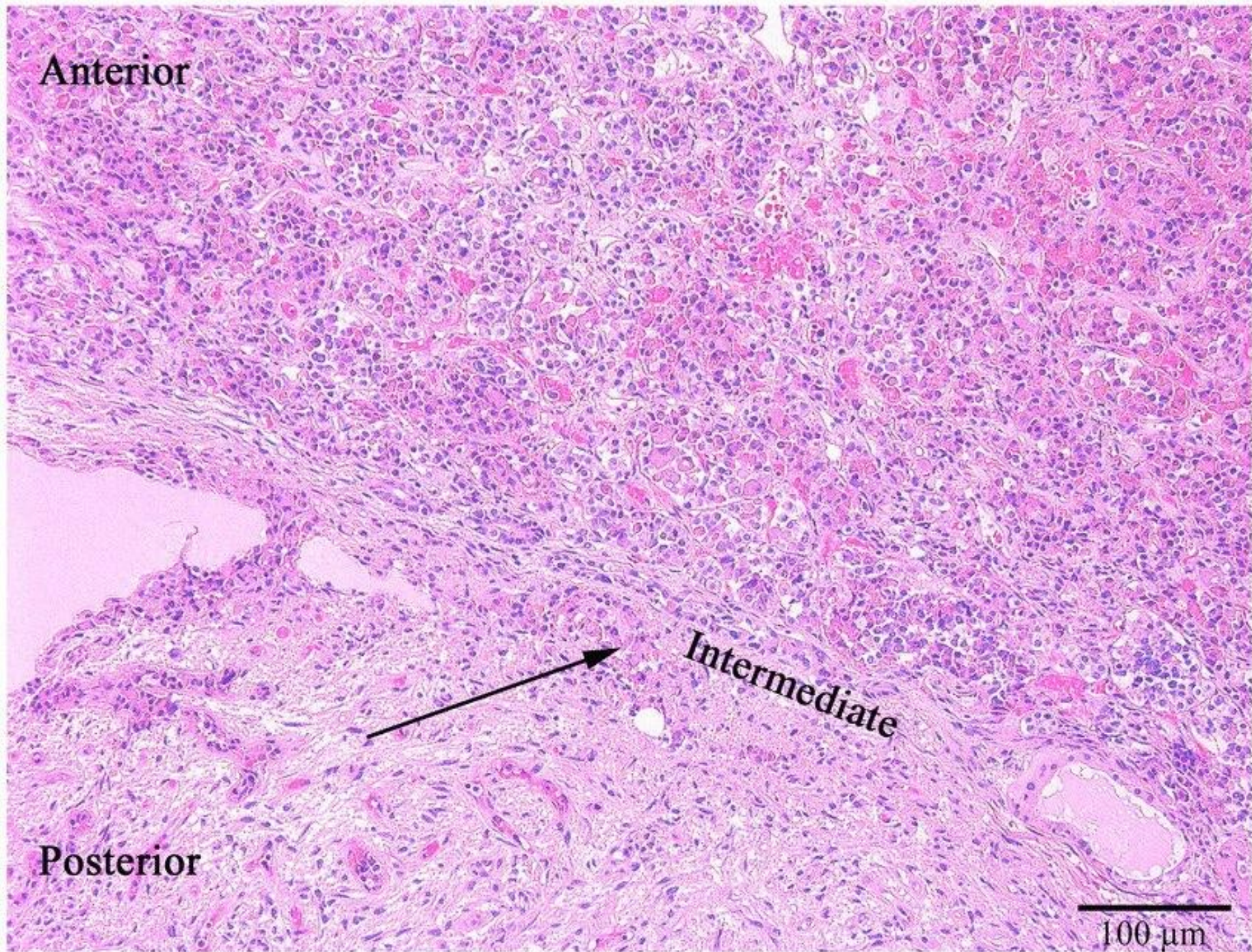


Anterior

Posterior

Intermediate

100 μ m



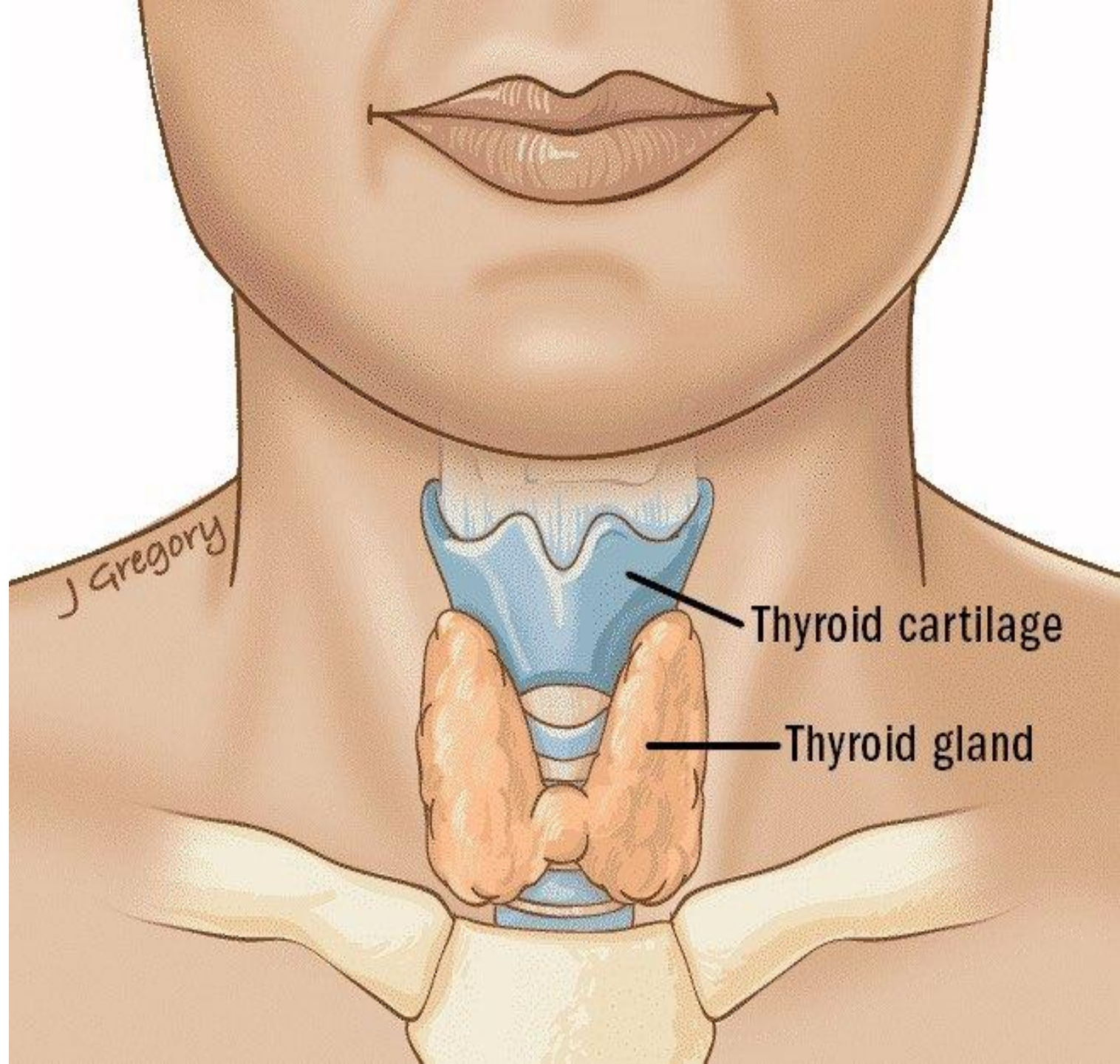
5- Thyroid gland

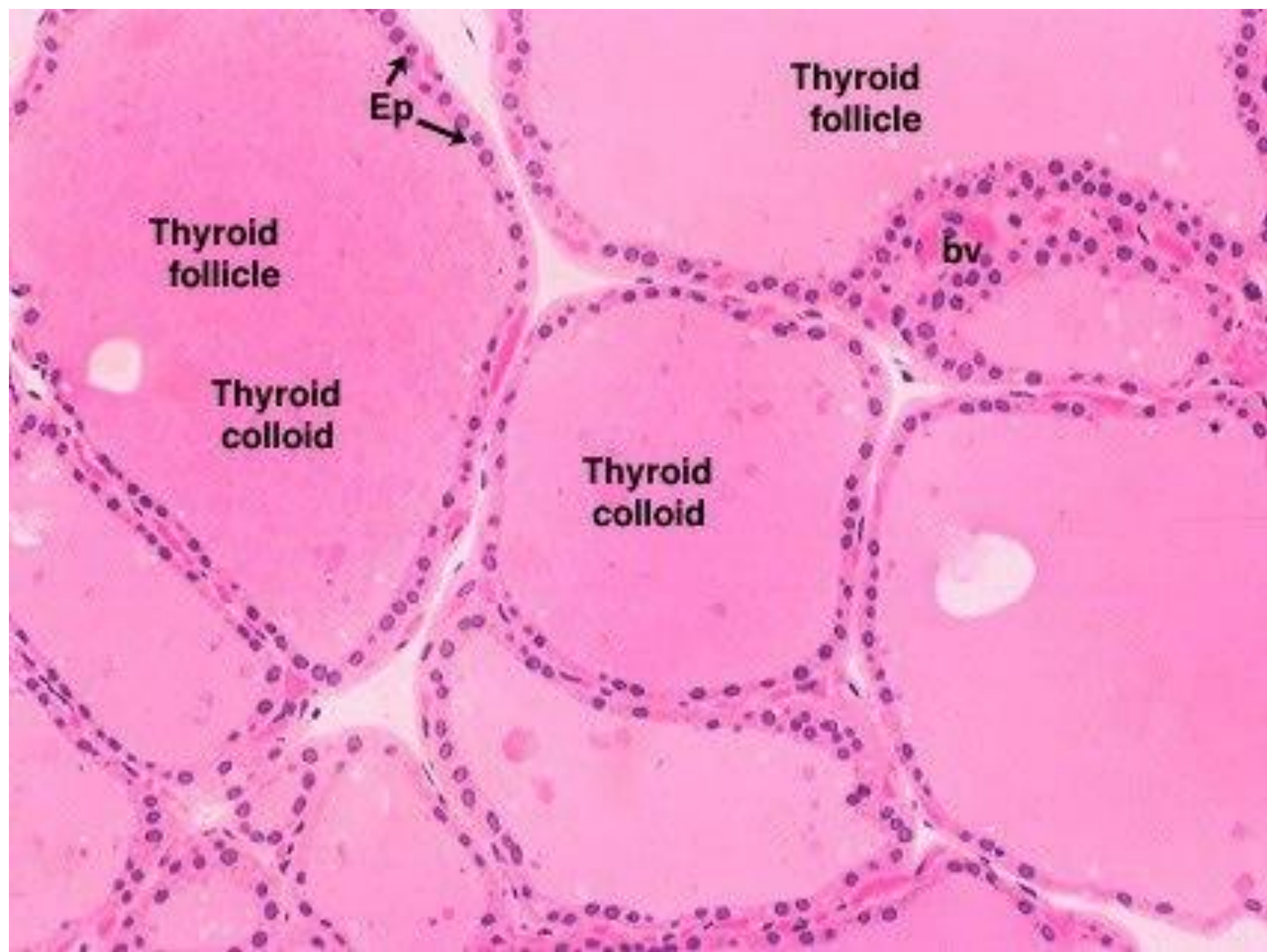
location

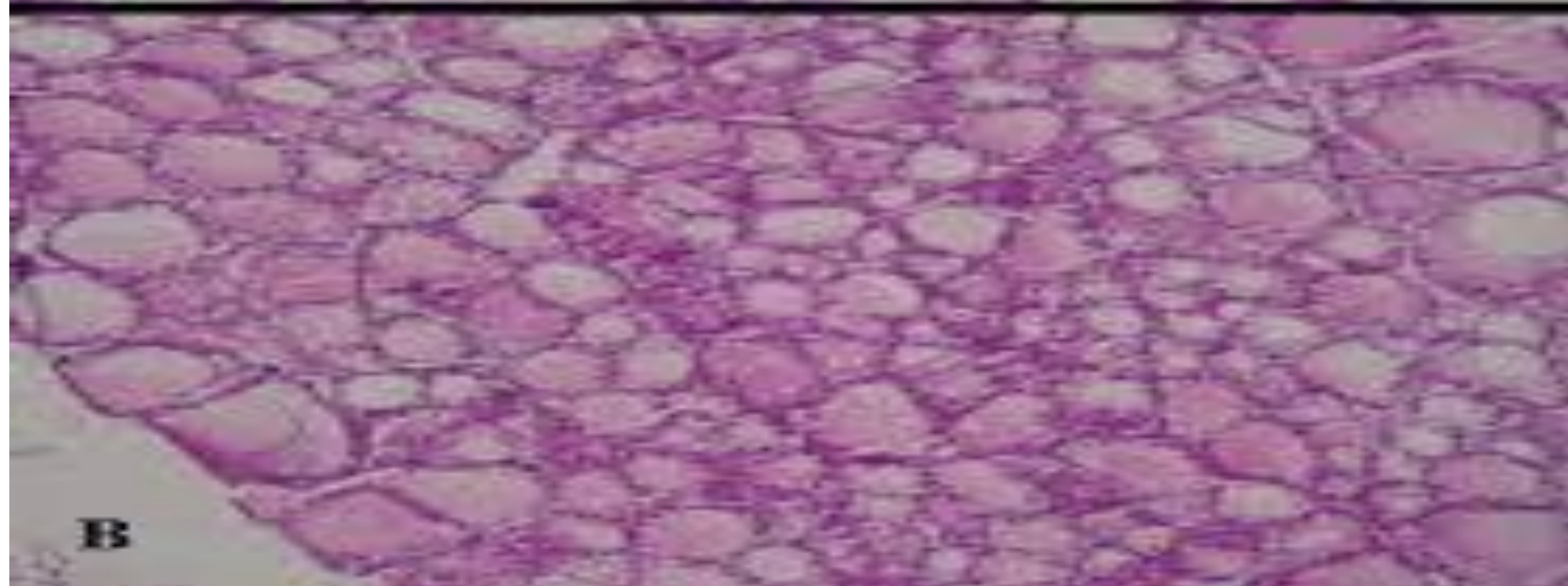
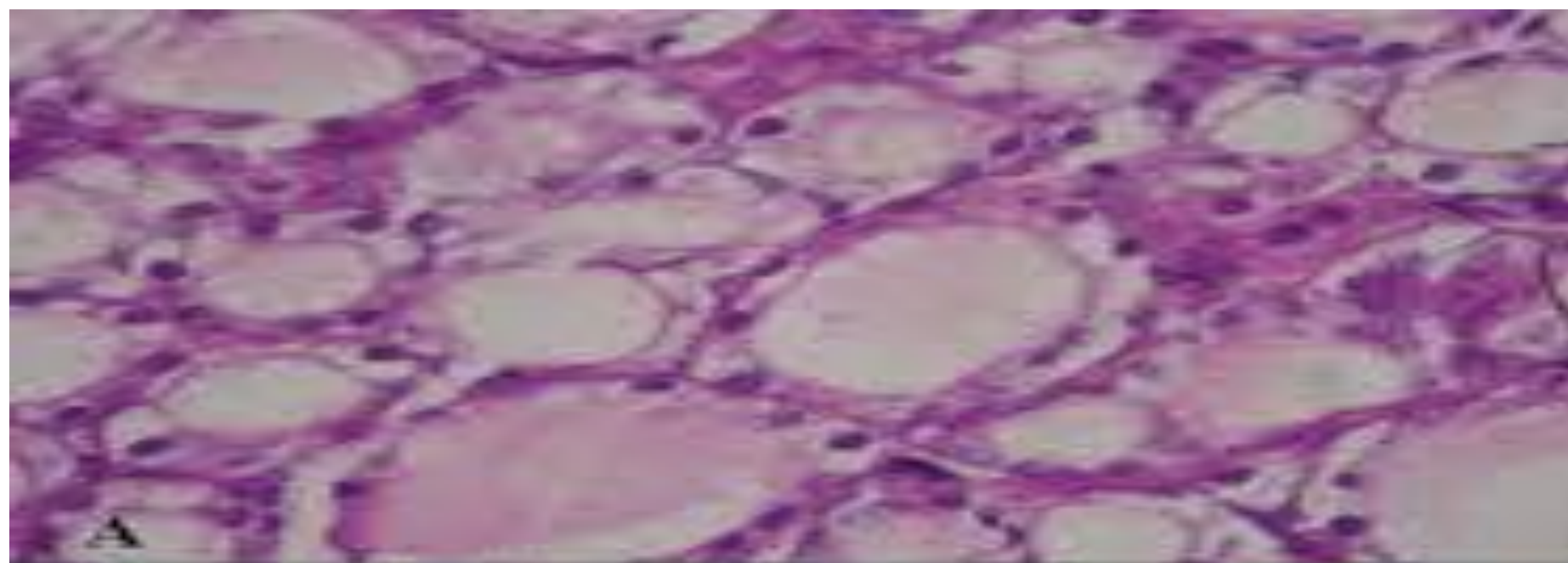
In the front of the neck, in front of the thyroid cartilage, and is shaped like a butterfly

Hormones

1. Thyroxine (T4)
2. Triiodothyronine (T3).







6- Parathyroid glands

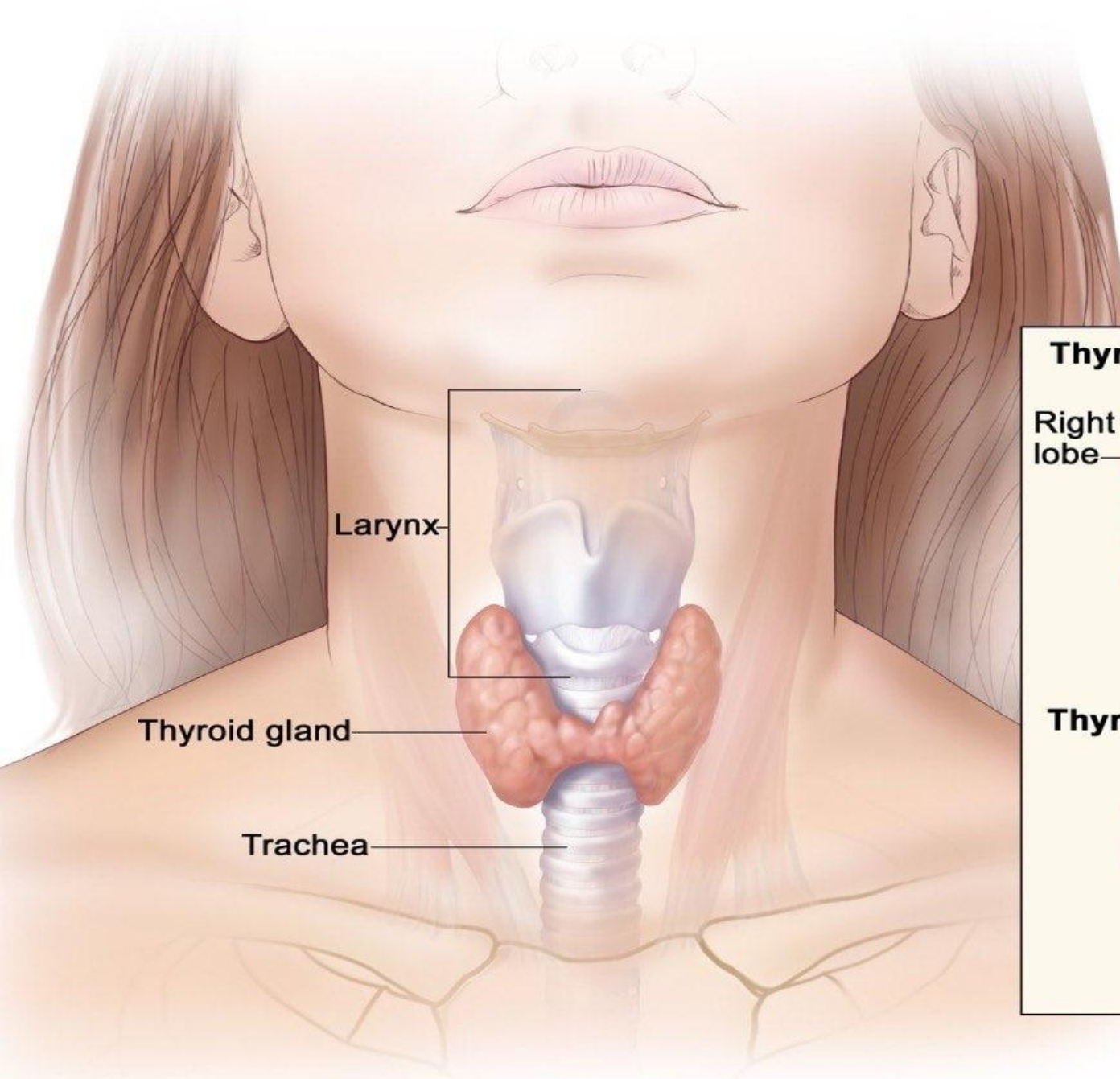
Location

On the back of the thyroid glands

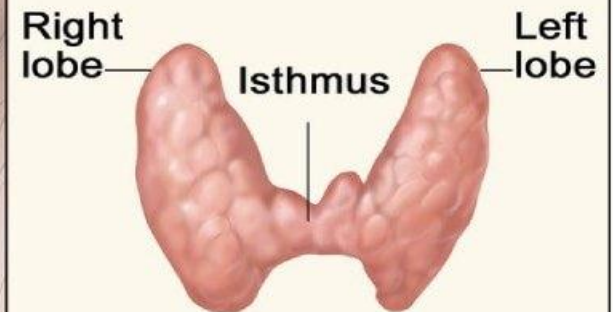
Hormones

Parathyroid hormone [PTH]

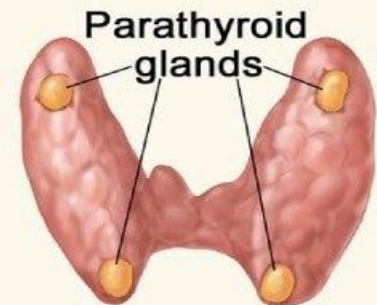
Anatomy of the Thyroid and Parathyroid Glands

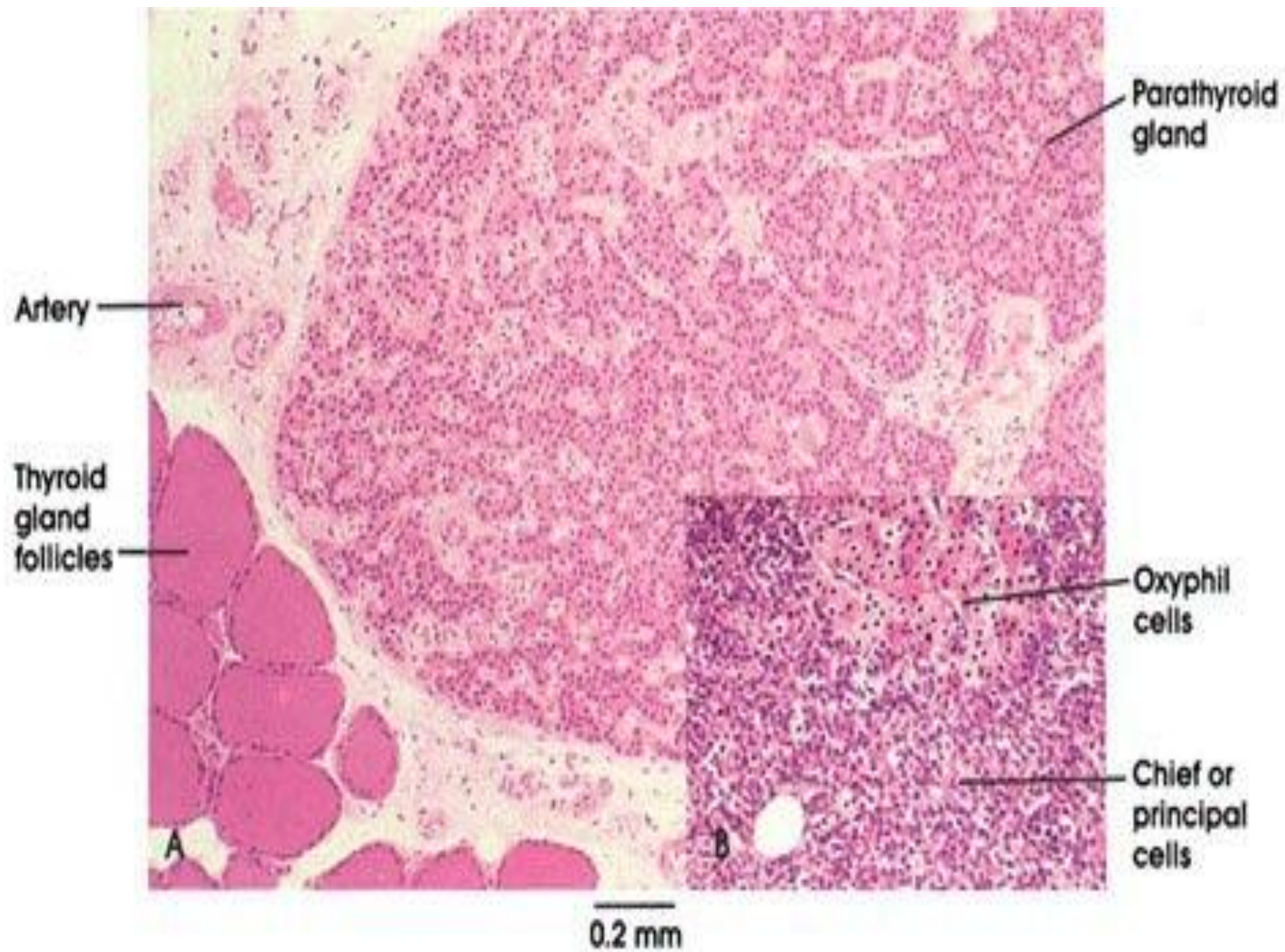


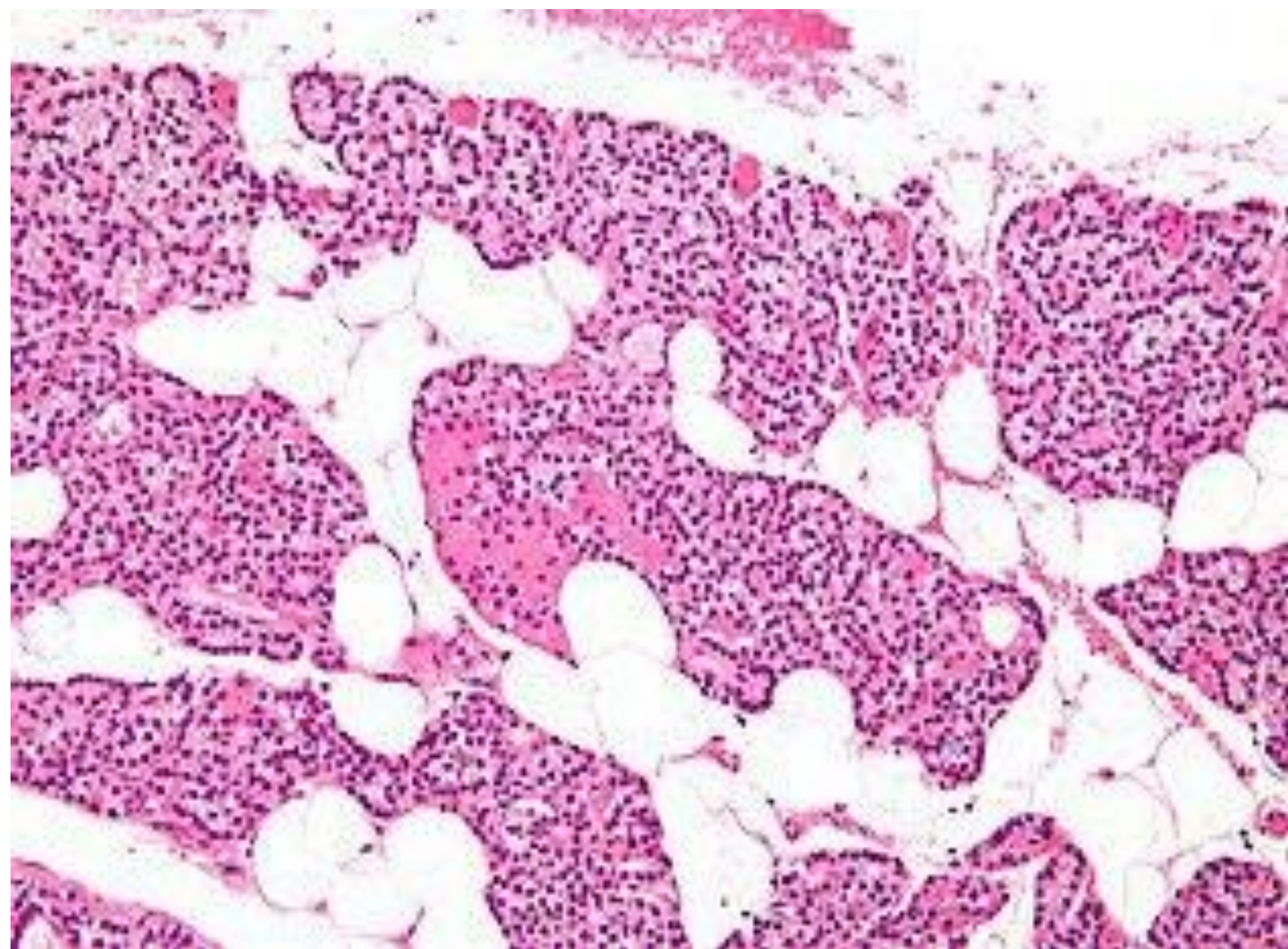
Thyroid gland (front view)



Thyroid gland (back view)







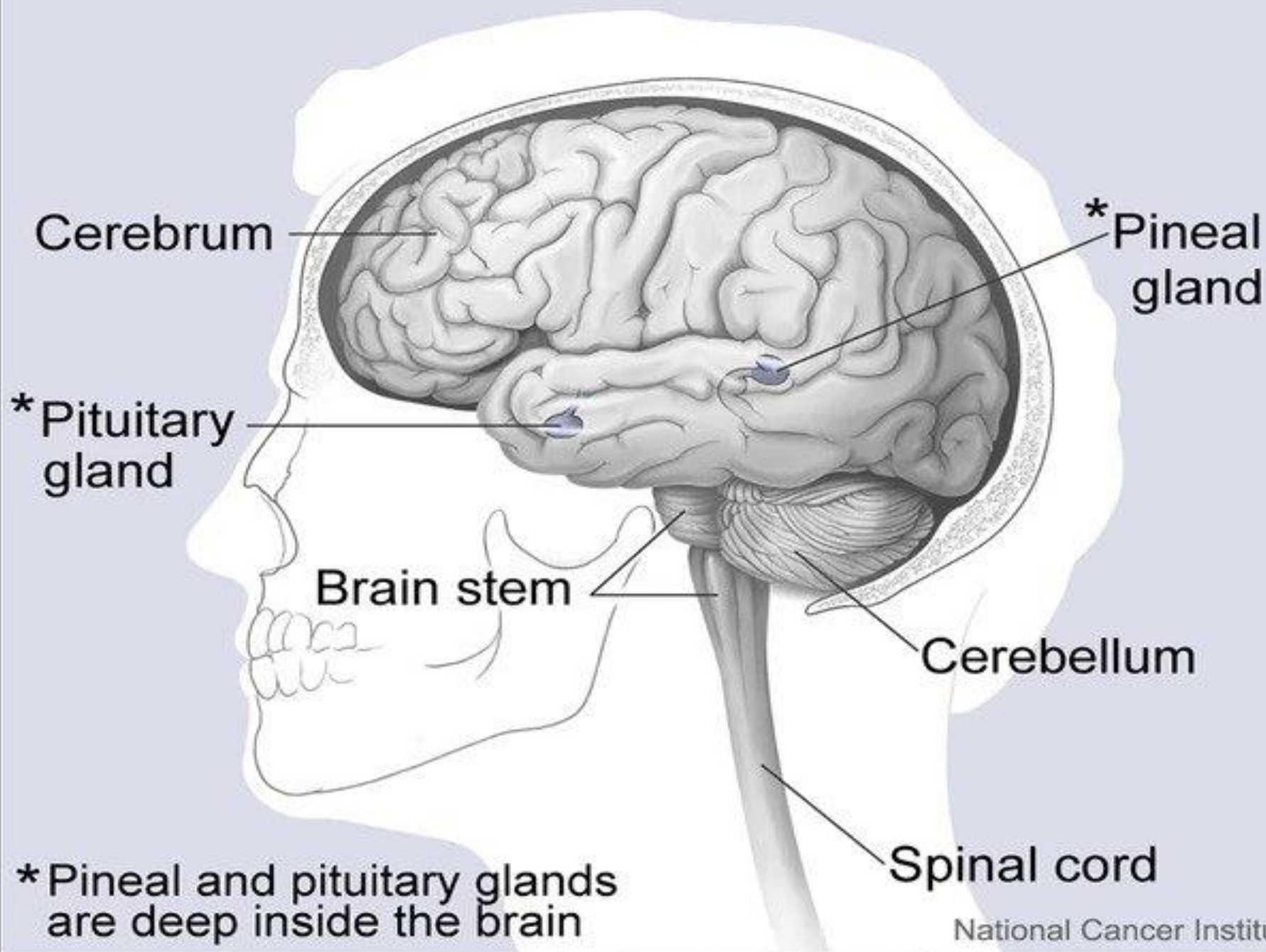
7- Pineal gland

Location

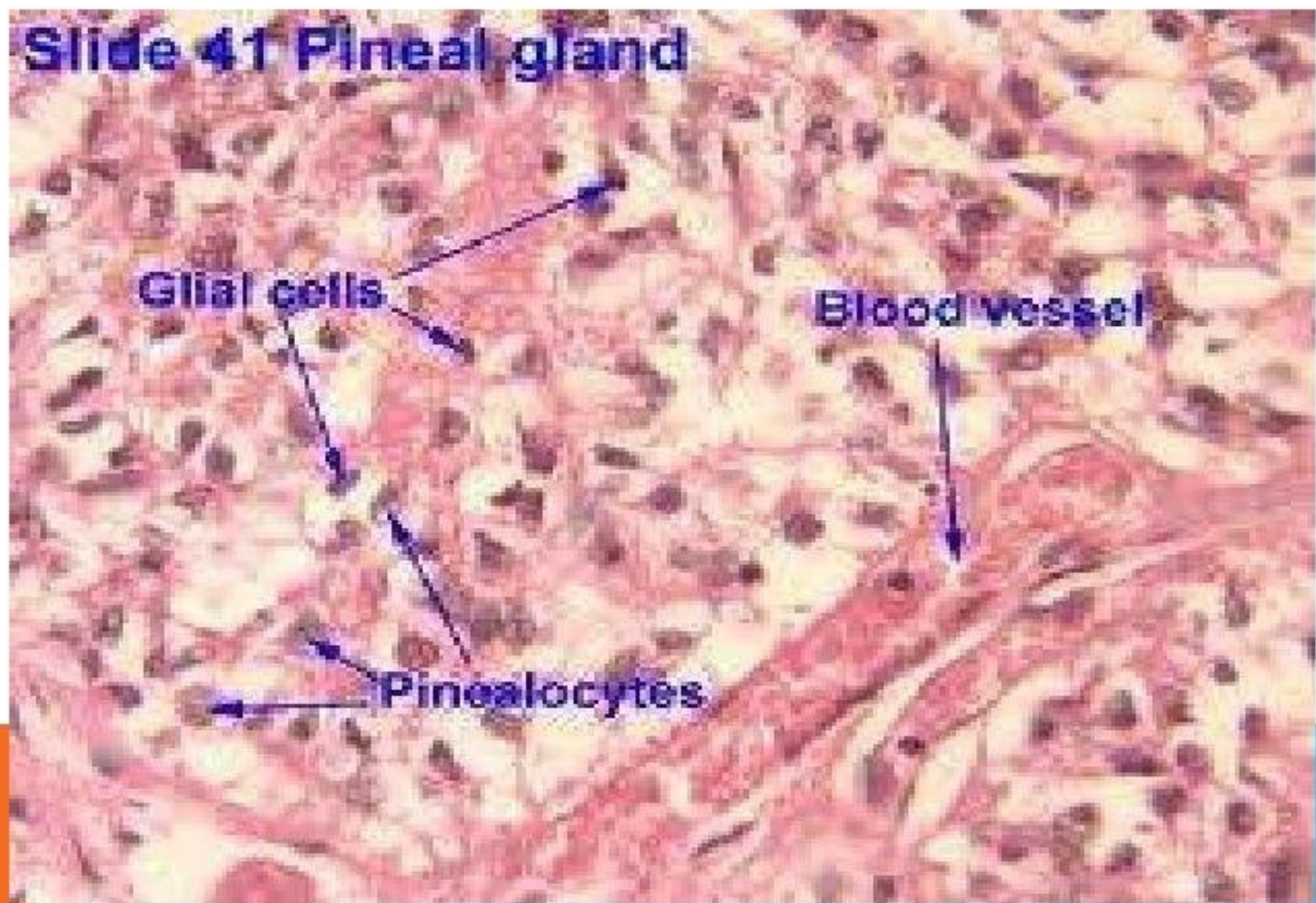
In the diencephalon of the brain

Hormones

Hormone melatonin



Slide 41 Pineal gland



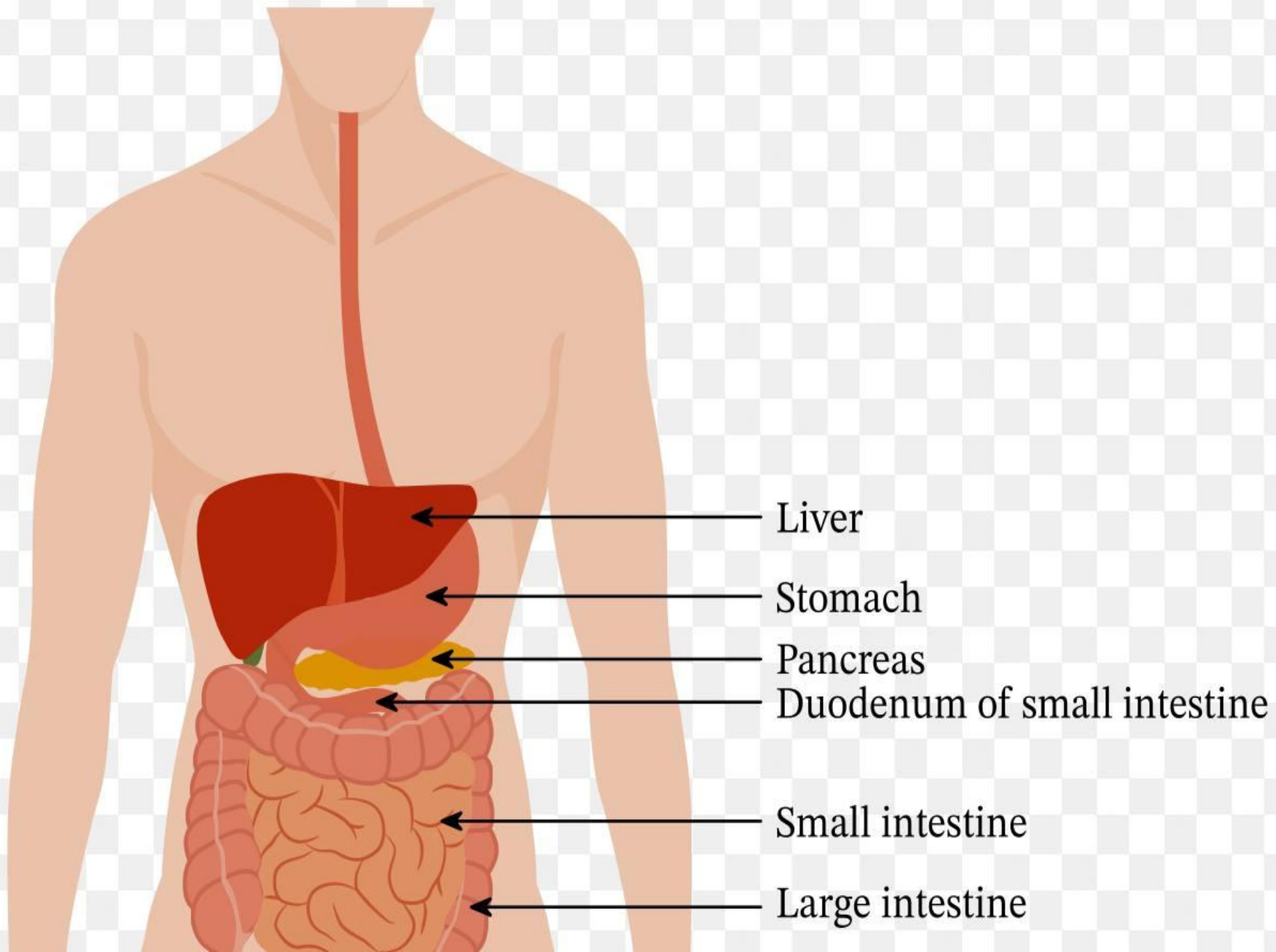
8- Pancreas

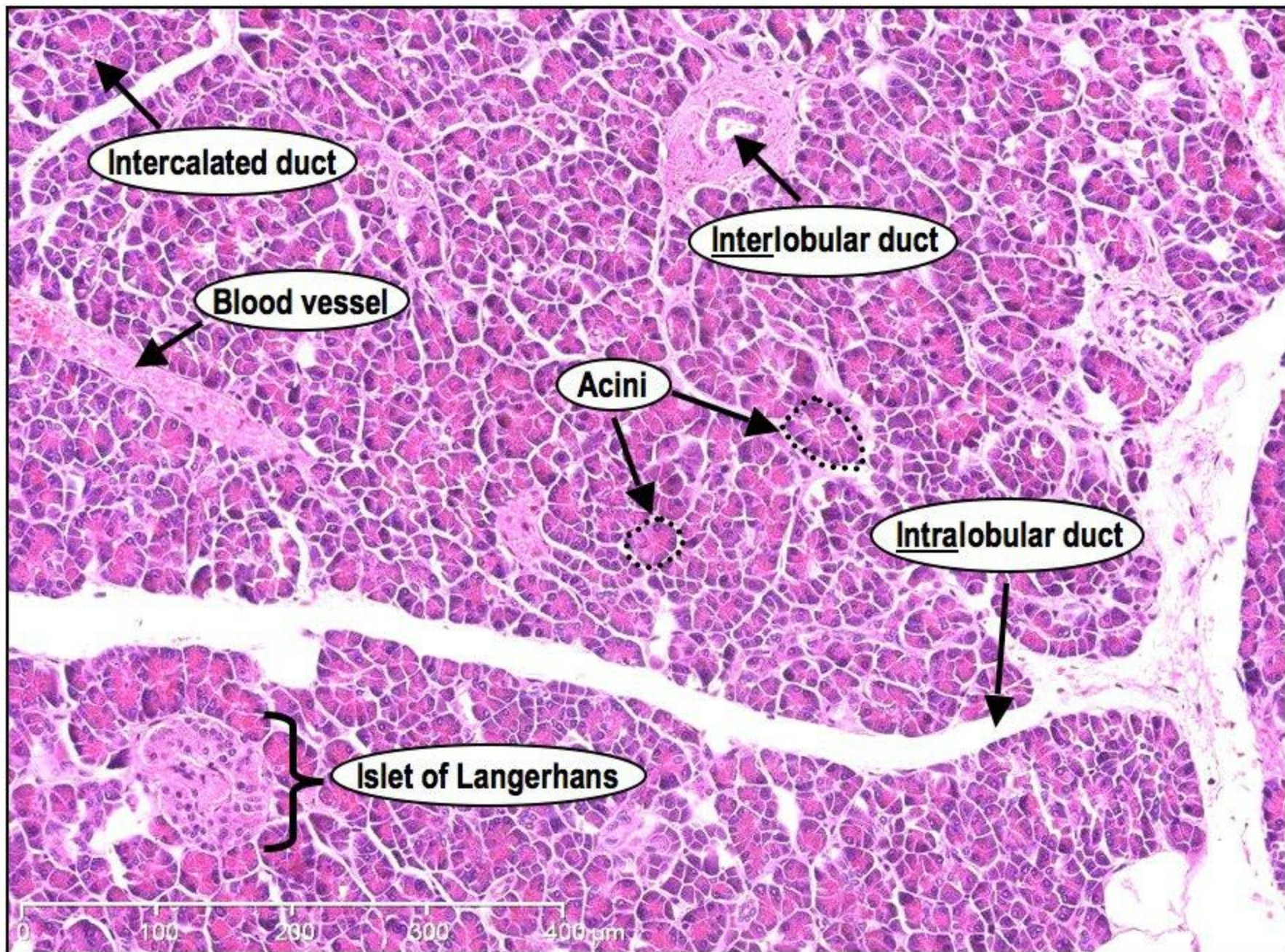
location

In the abdomen, below and behind the stomach, is both an exocrine and an endocrine gland.

Hormones

Insulin and Glucagon





9- Gonads

- Also called sex gland, or reproductive gland
- Include the male reproductive gonads or testes and female reproductive gonads or ovaries

Hormons

- Androgens, estrogens, and progestins, all of which are found in both males and females but at different levels.

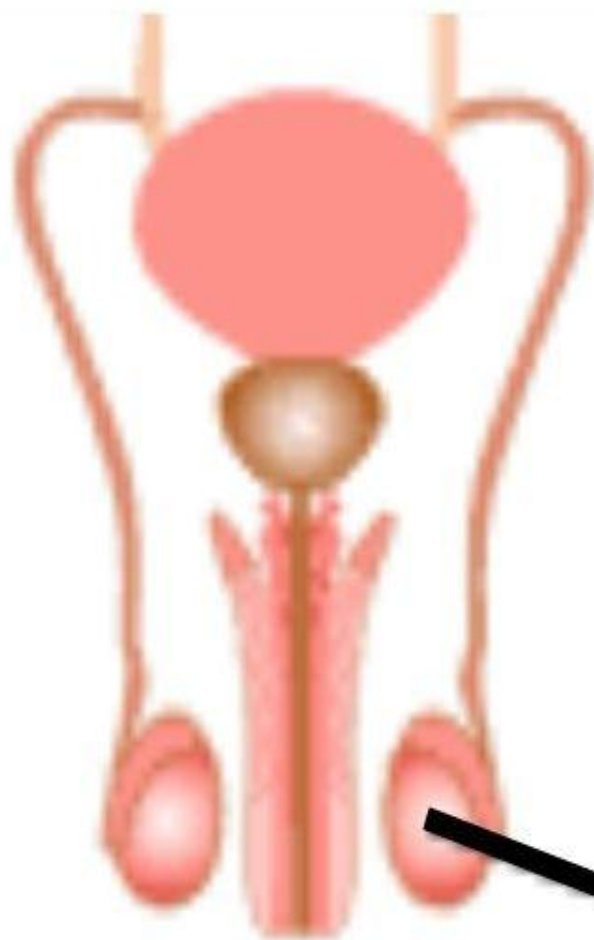
- The **ovaries** of the female, located in the pelvic cavity, release two main **hormones**

1- estrogens

2- Progesterone

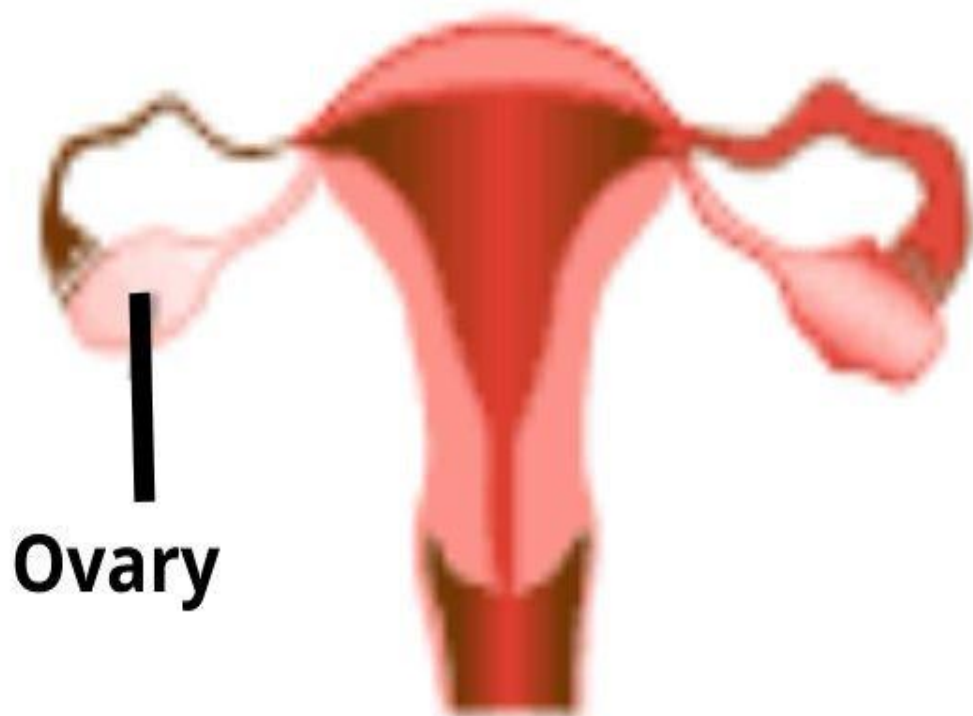
- The **testes** of the male **produce** testosterone at puberty

Male Gonads



Testes

Female Gonads



Ovary

**THANK YOU
FOR
LISTENING**