

Pudendal Artery

PERINEUM

Aorta



Common Iliac Artery



Internal Iliac Artery



Internal Pudendal Artery

LABIA MAJORA

Aorta



Common Iliac Artery



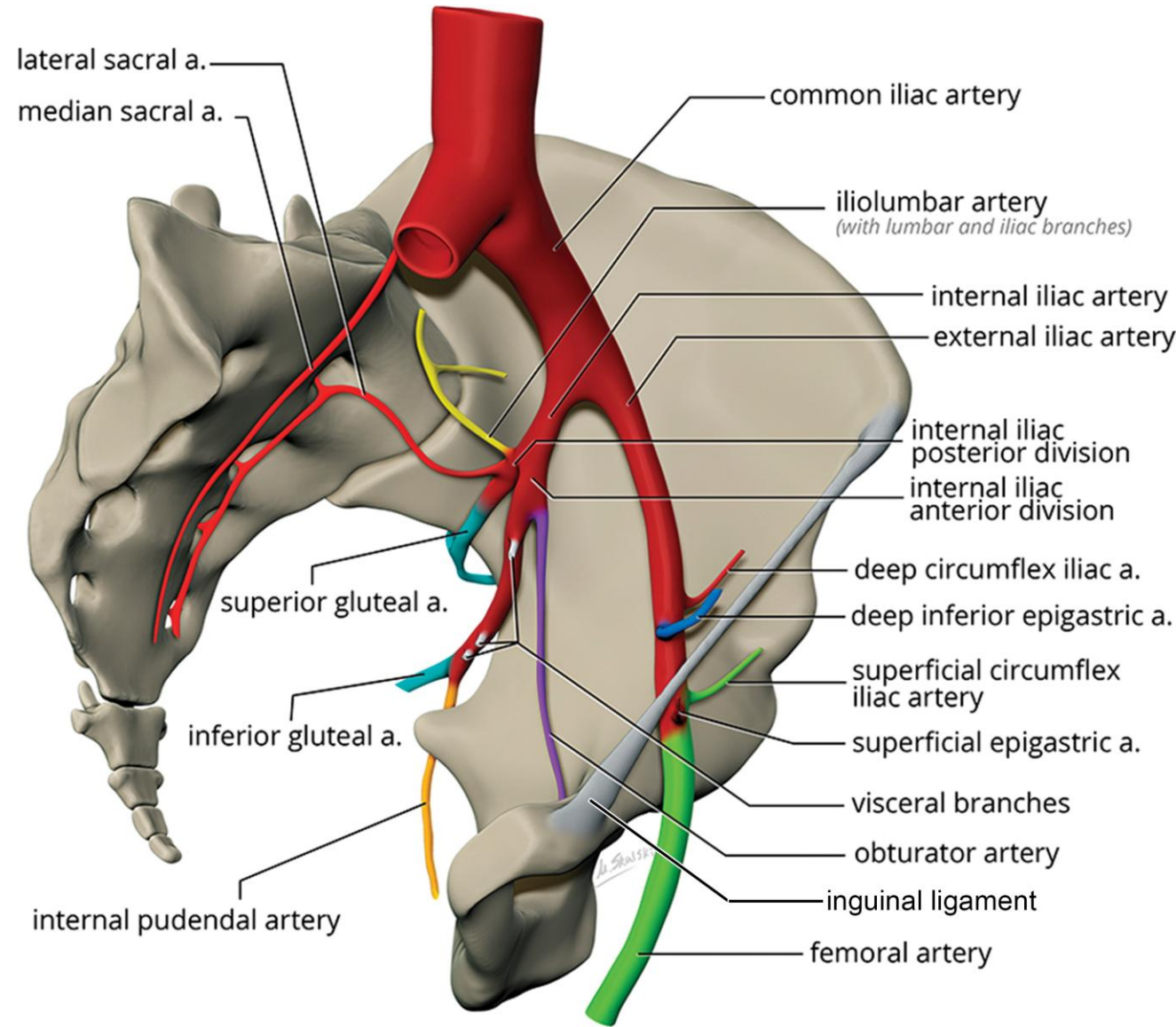
External Iliac artery

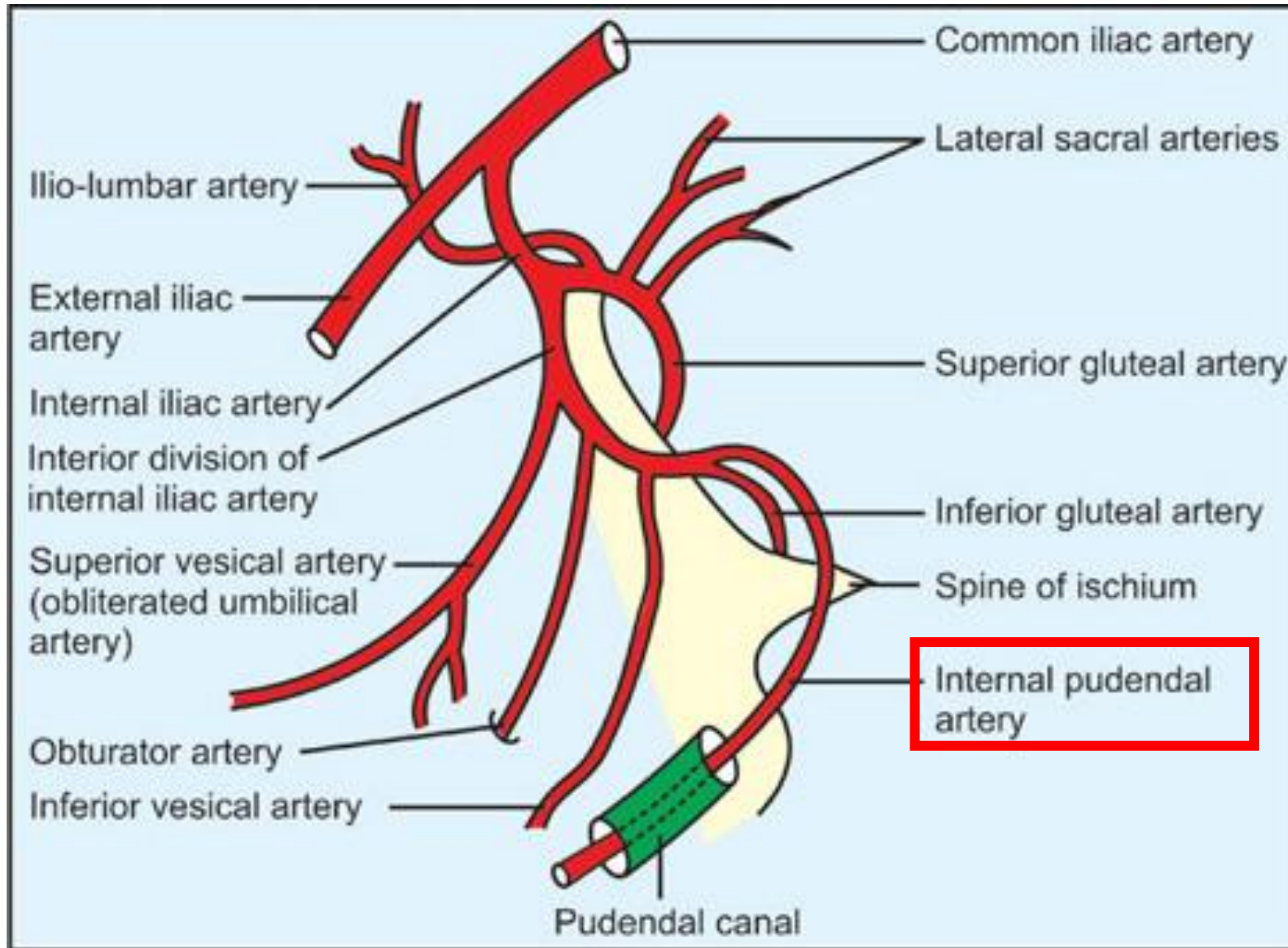


Femoral artery

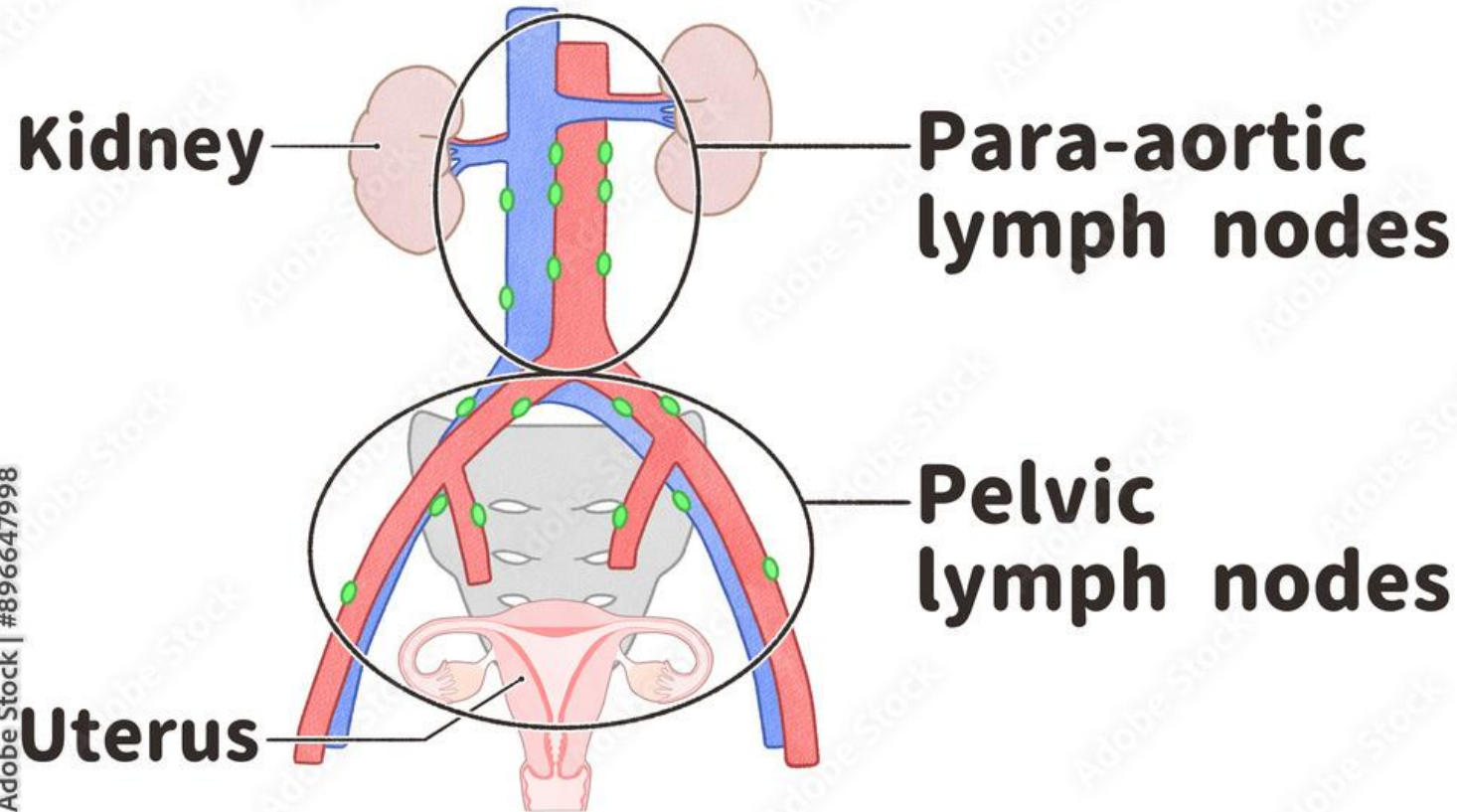


External Pudendal Artery





Relevant Lymph Node



Para-aortic and pelvic lymph node is the pivotal lymph node that is associated with the female reproductive system.

They help by boosting the immune system.

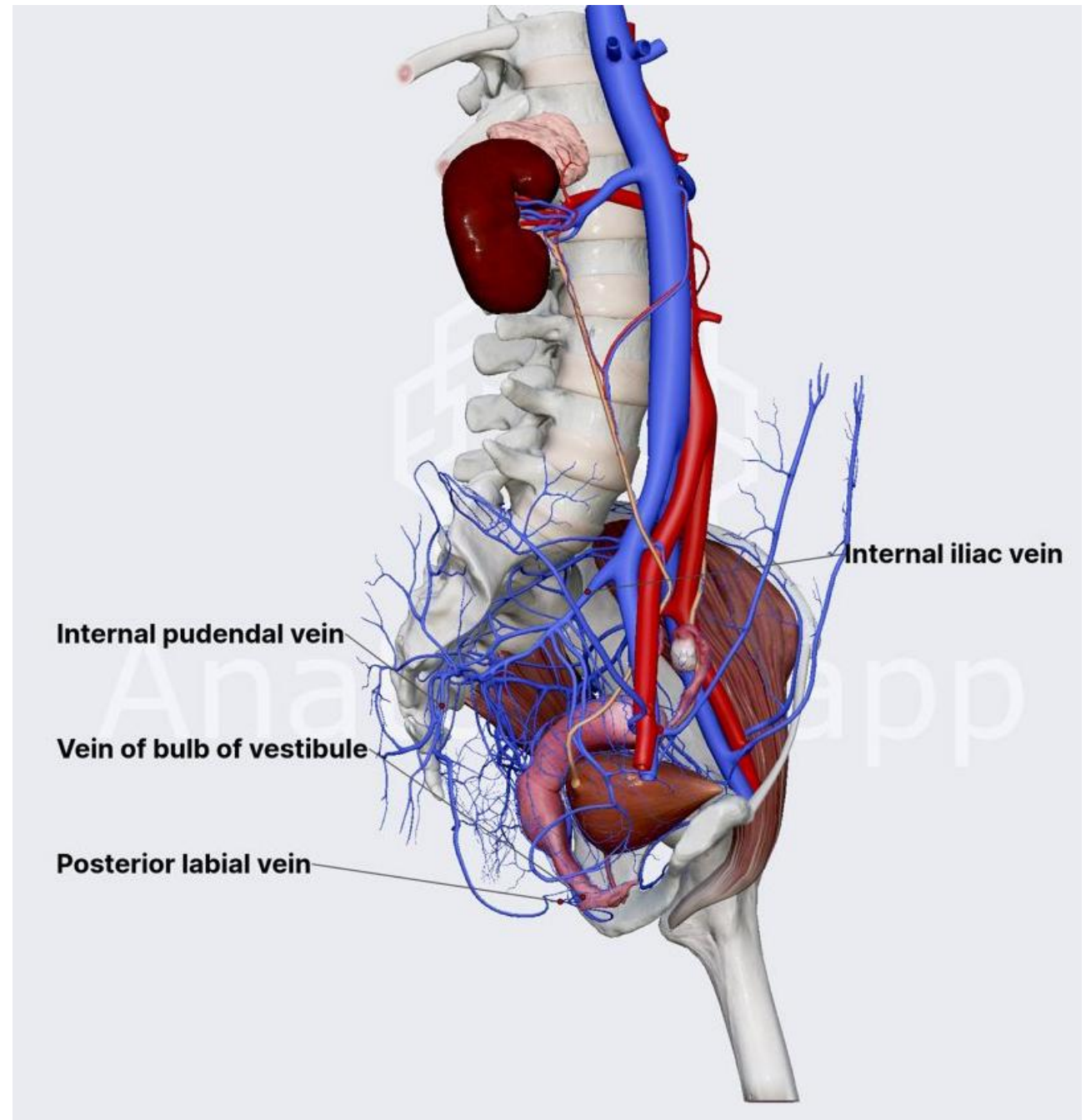
It filters the lymph fluid that consists of white blood cells.

Pudendal Vein

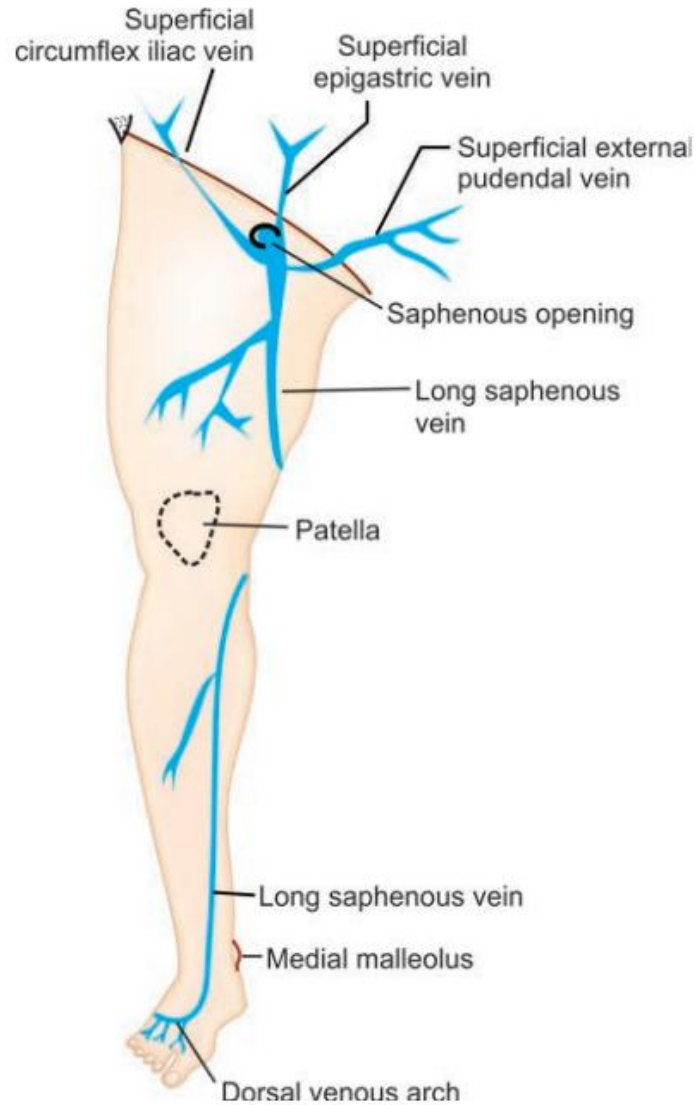
Internal
Pudendal Vein



Internal iliac
vein



Pudendal Vein



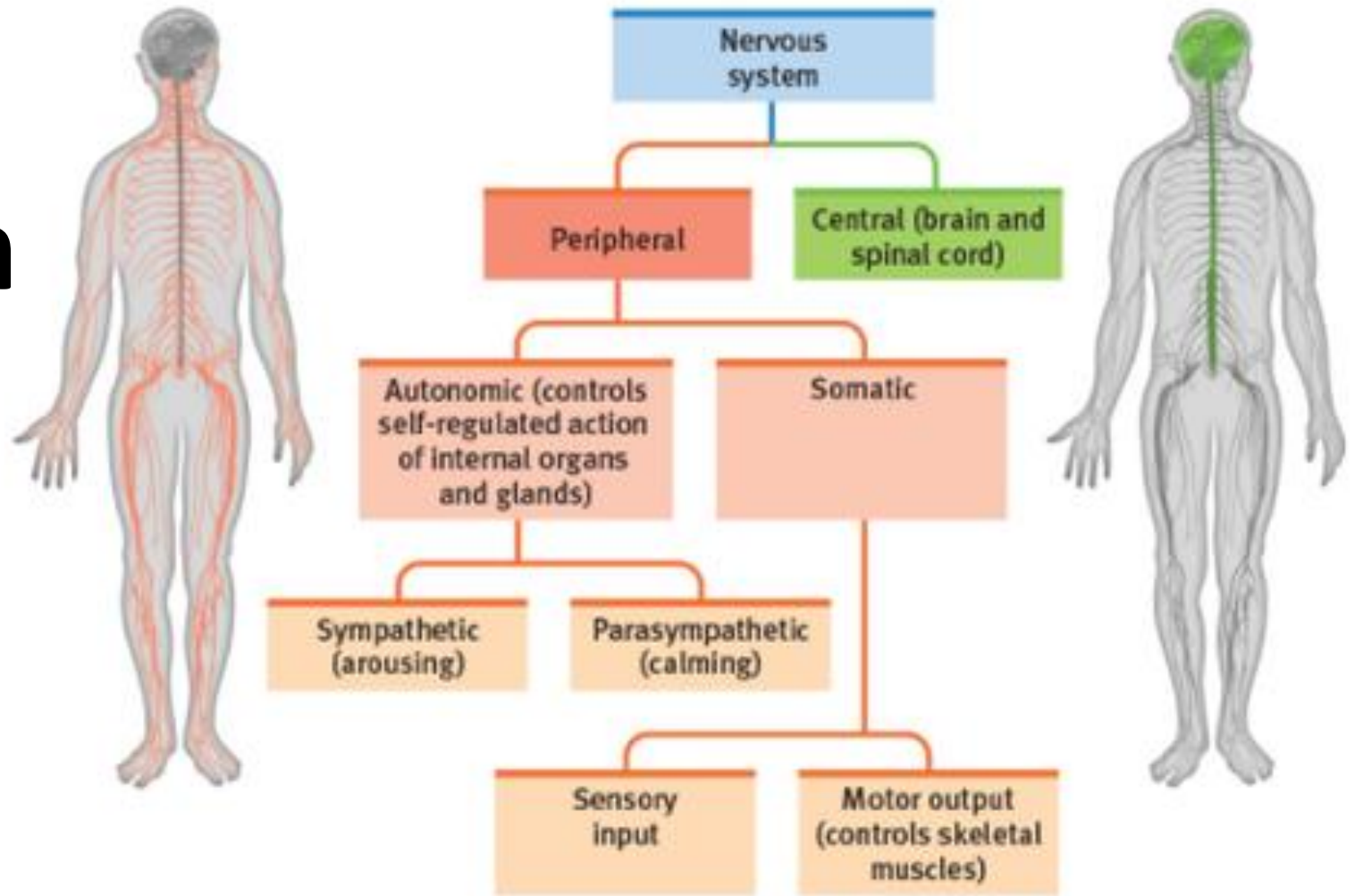
Drains into

**External
Pudendal
Vein**



**Great
Saphenous
Vein**

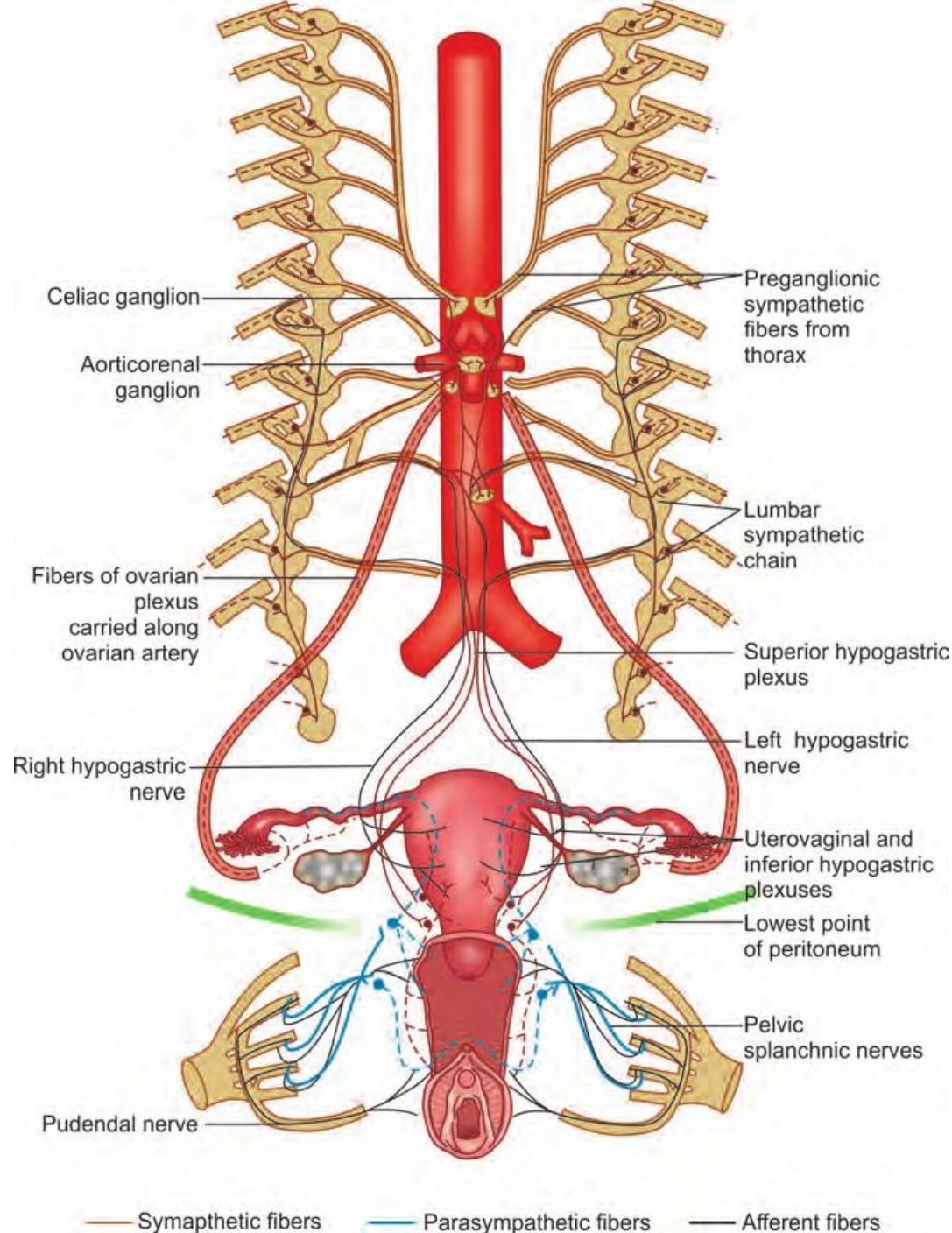
Divisions of the Nervous System

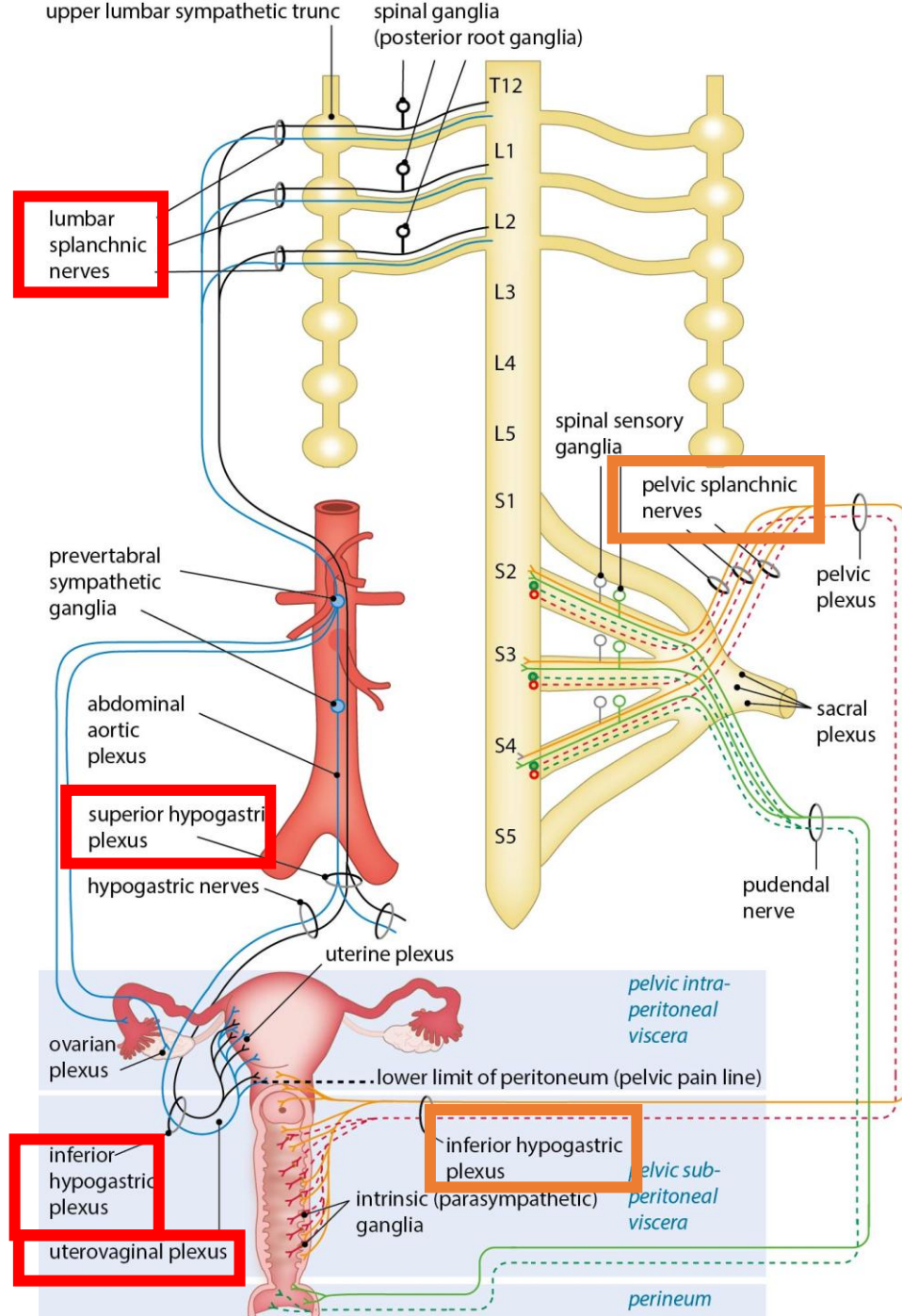


Nerves

The autonomic nerves in the female reproductive tract have several functions:

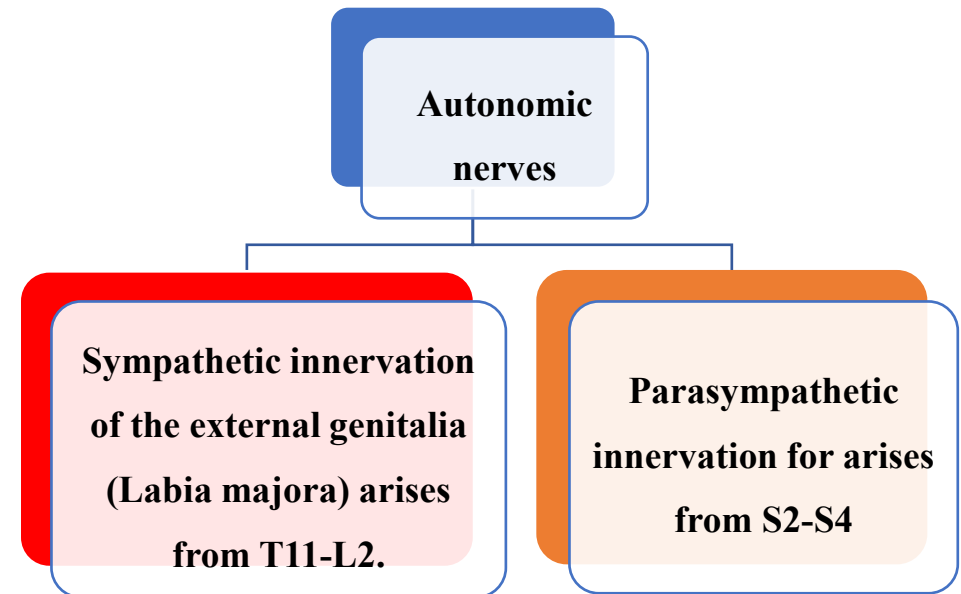
- **Stimulate smooth muscle activity/contraction** whether (vascular/nonvascular).
- **Increase secretions in the glands** (ovaries/vestibular/Bartholin/Skenes).
- **Increase interactions with the immune cells.**
- **It passes information or signals to the central nervous system via sensory neurones/nerve cells to the integrating centre in the brain where information is processed.**





Nerves

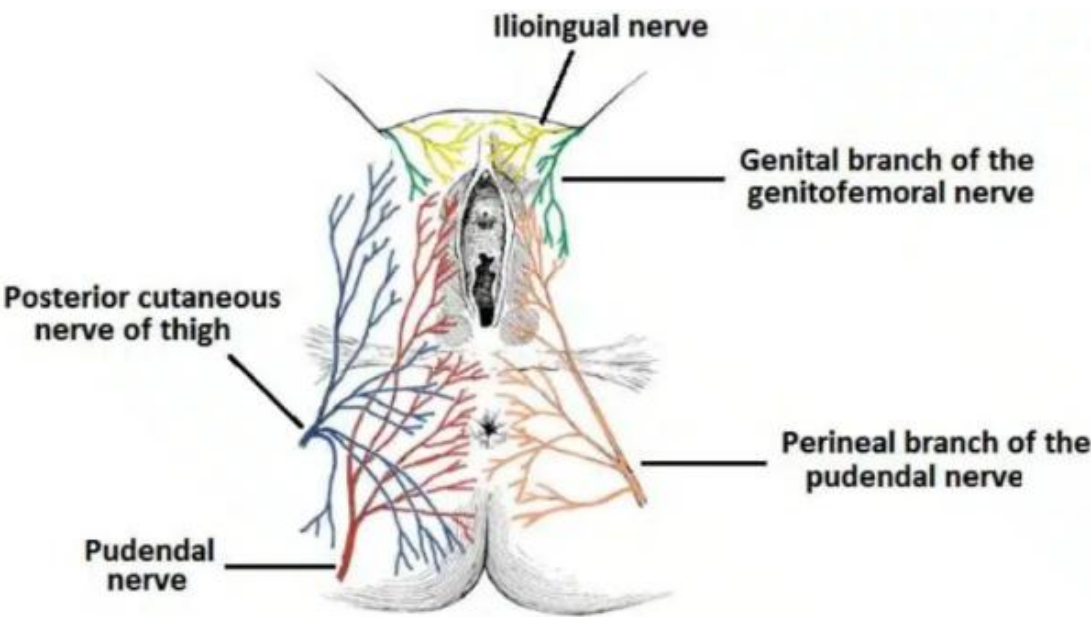
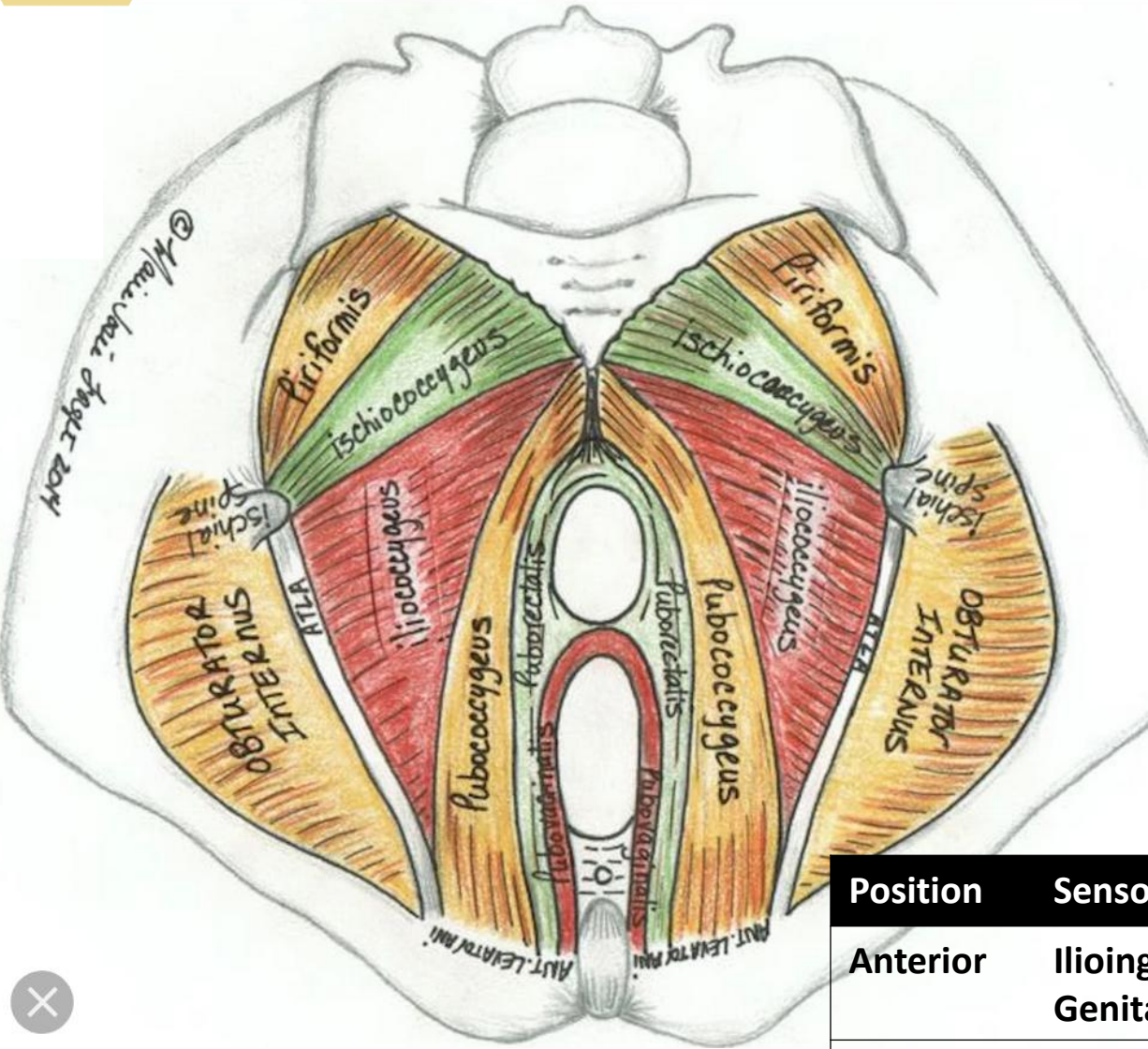
The activation of the **sympathetic nerves** in the **uterus** during **fight or flight response** is useful in **non-pregnant females** but not in **advanced state of pregnancy** as it could **limit the blood flow to the placenta** or **premature delivery**.



Internal Lumbar splanchnic nerves via the uterovaginal plexus.

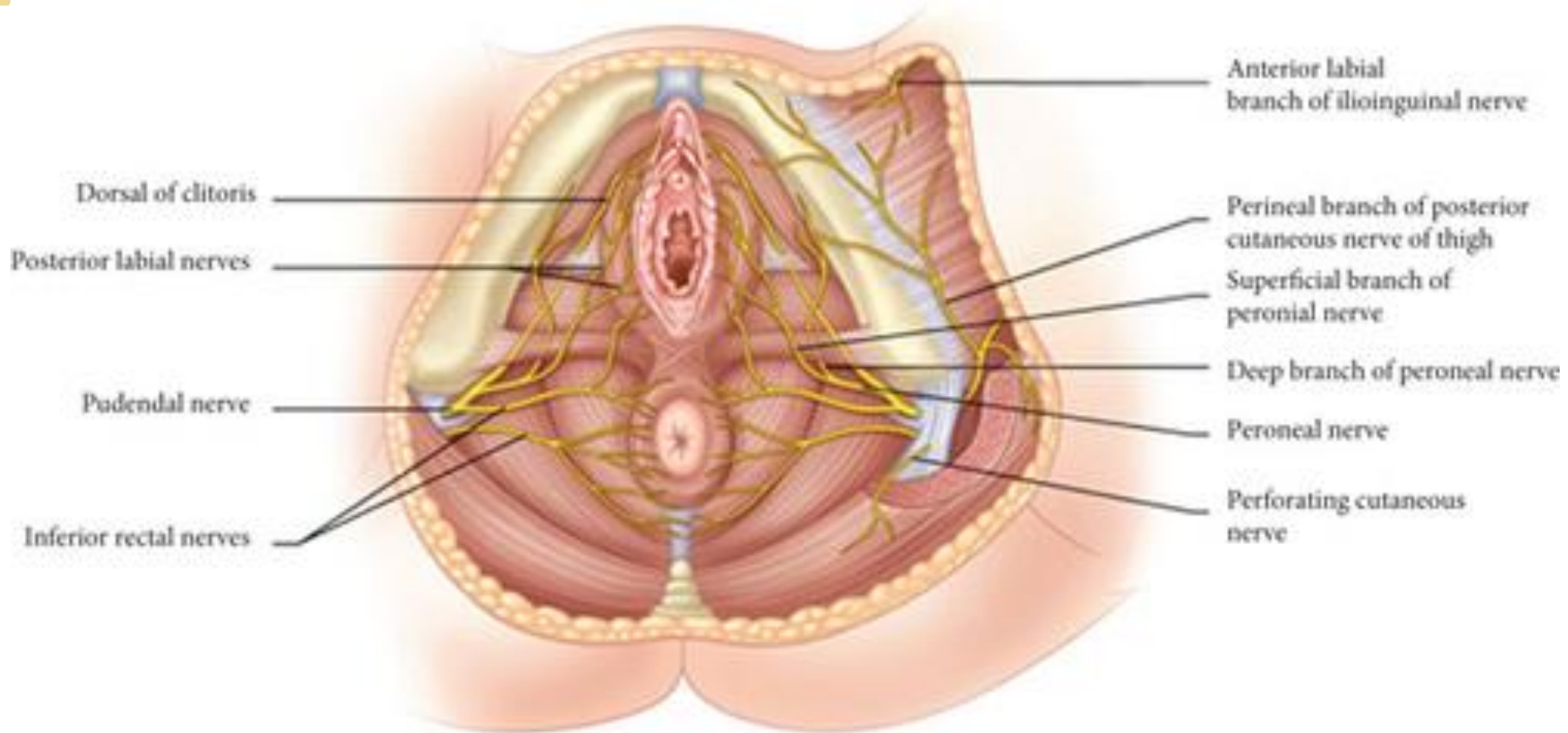
Pelvic splanchnic nerves via the uterovaginal plexus.

External Genitalia Autonomic Nerves Vulva



Position	Sensory nerve innervation	Motor nerve innervation
Anterior	Ilioinguinal nerve (L1) Genital branch of genitofemoral nerve (L1,2)	Pudendal nerve (S2, 3, 4)
Posterior	Pudendal nerve Posterior cutaneous nerve of the thigh/femur	Pudendal nerve (S2, 3, 4)

External Genitalia Autonomic Nerves Vulva

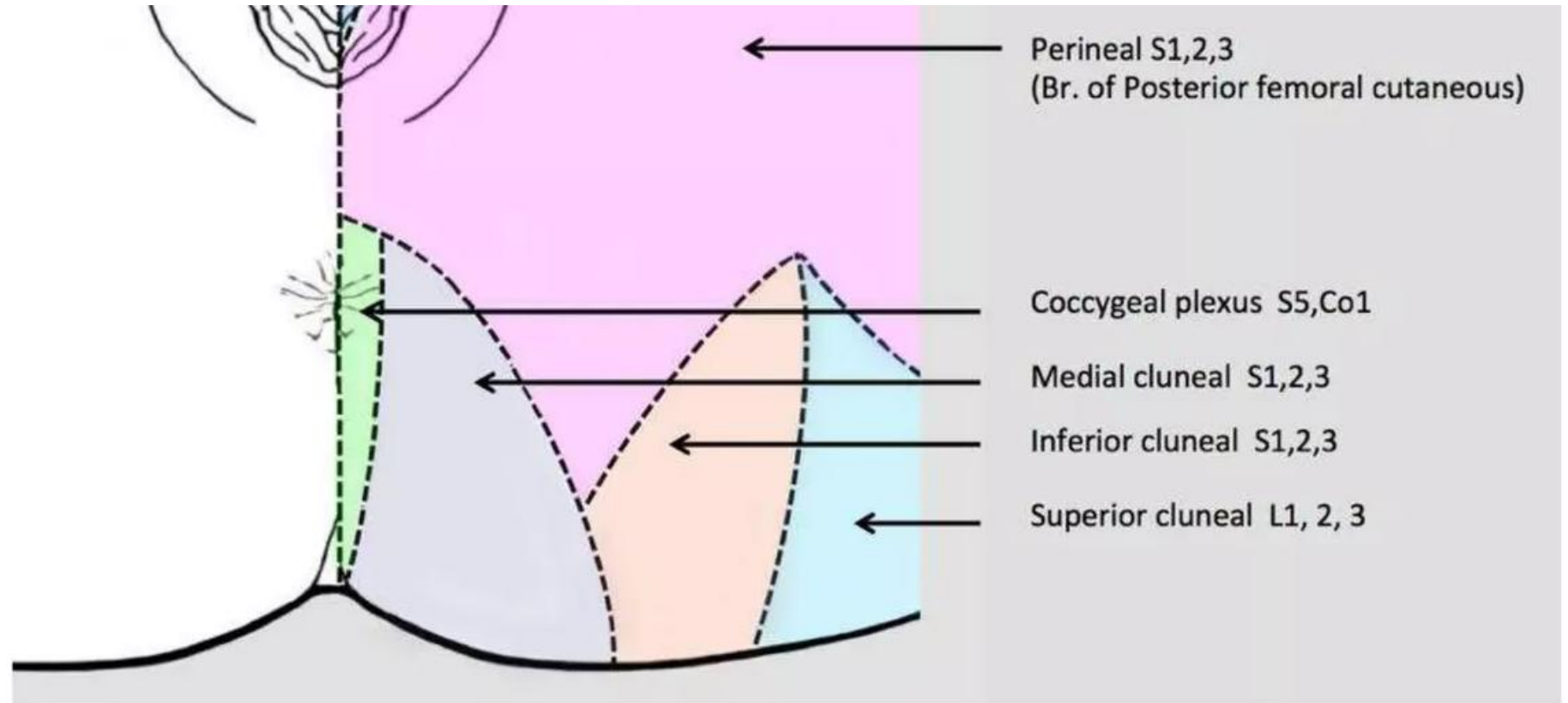


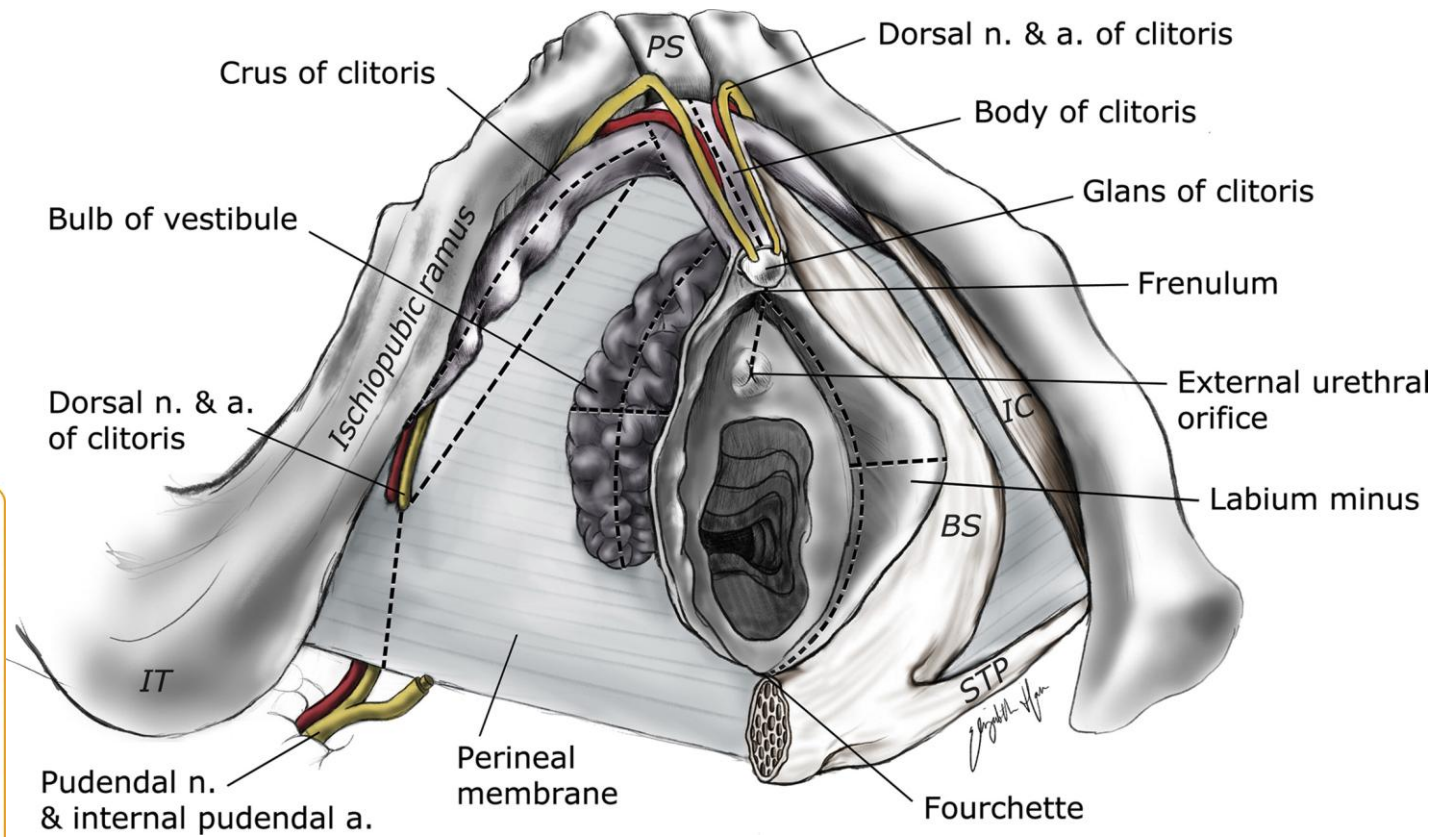
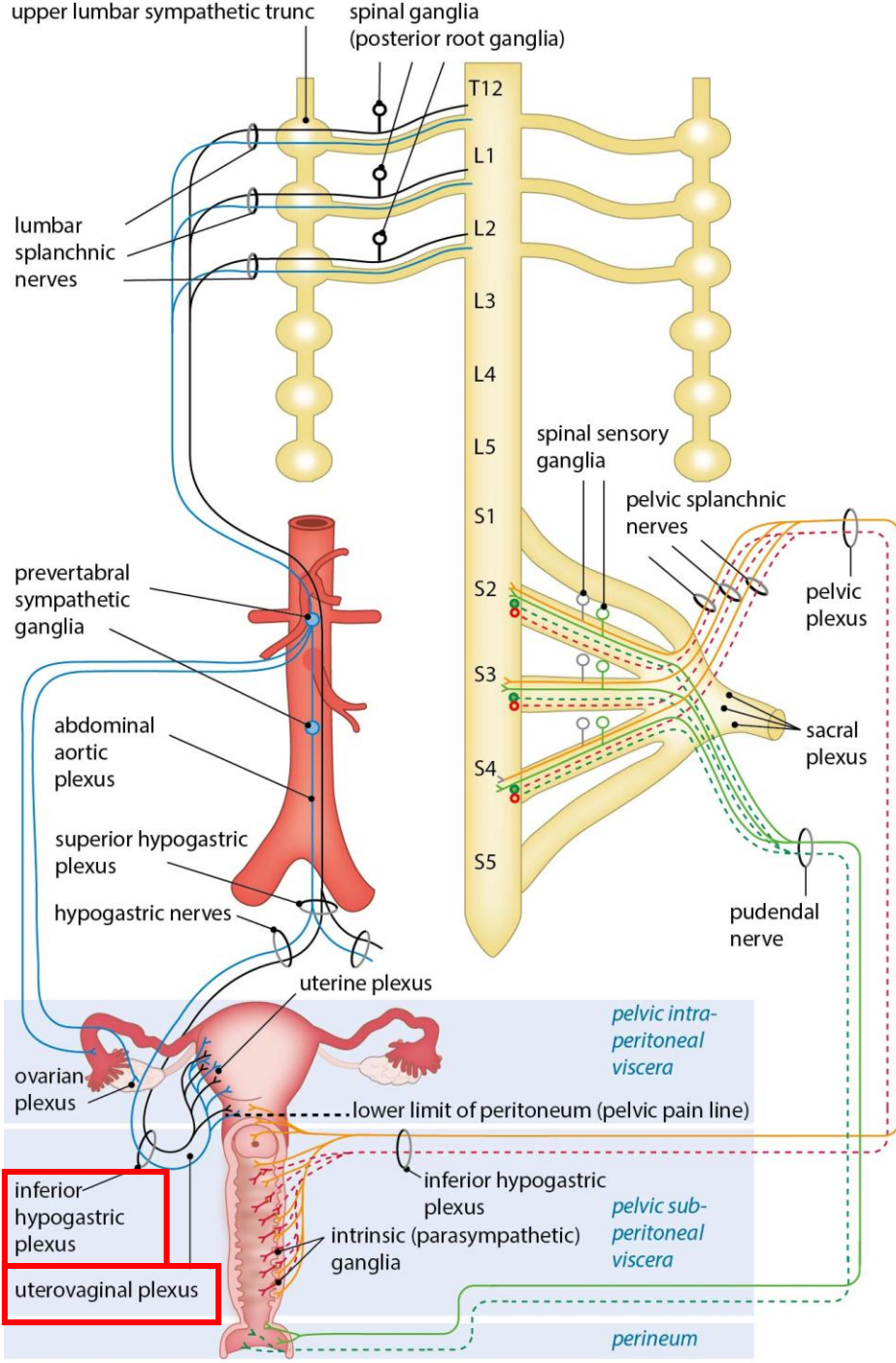
External Genitalia Autonomic Nerves Vulva

Cluneal nerves

**There are three types of cluneal nerves:
Inferior, medial and superior.**

The inferior cluneal nerve is found inferior to the posterior femoral cutaneous nerve of thigh/femur.





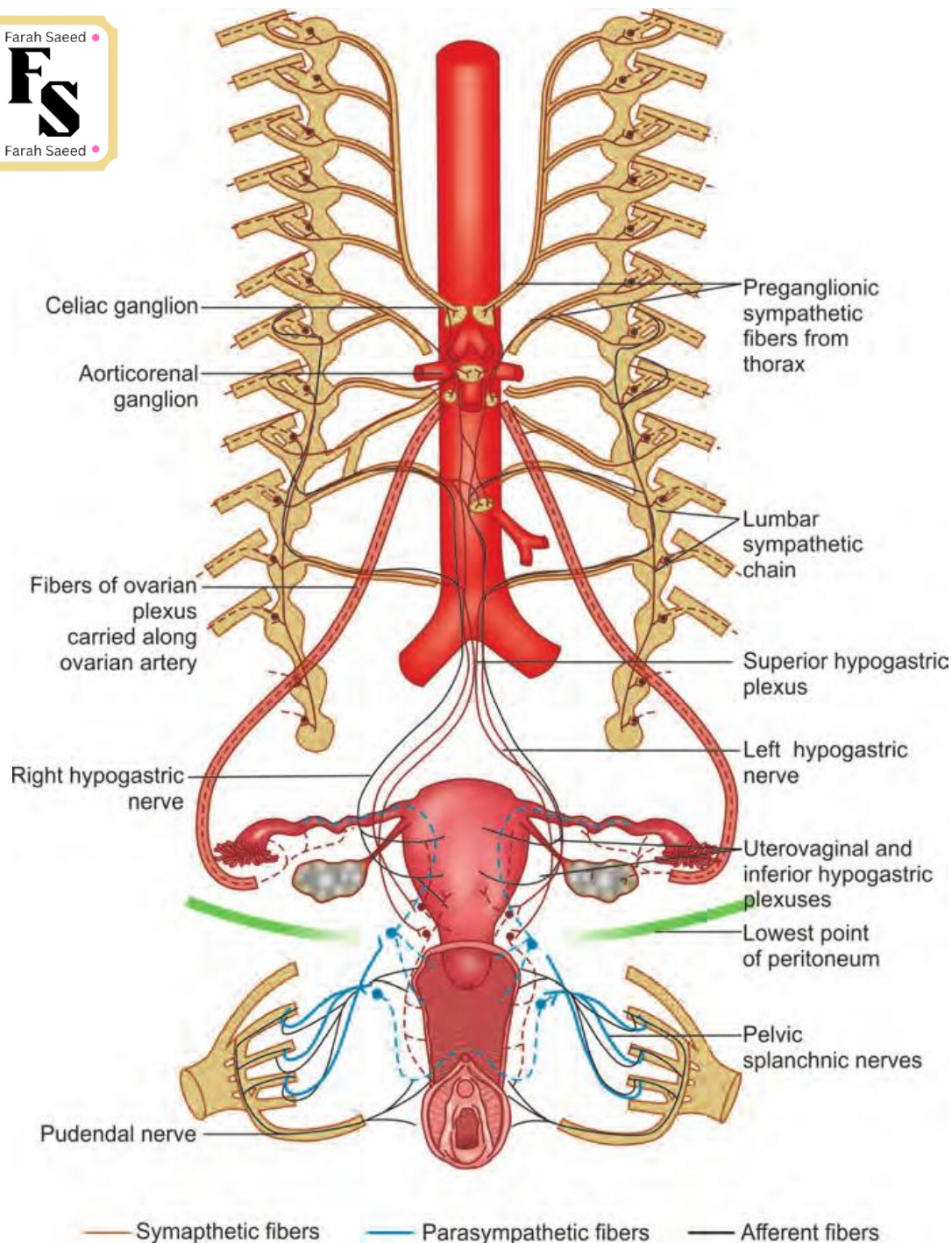
Uterovaginal plexus (distal part of the uterus) pass inferiorly (down) on the sides, down the inferior of the hypogastric plexus and on the top of the vagina (superior) where it follows with the vaginal artery. This is pass down from the pelvis into the perineum.

The vestibule and the cavernous nerves of the clitoris seems part of the uterovaginal plexus and received parasympathetic nerves.

Internal Genitalia Sympathetic Nerves

Fight or Flight Response

- Early puberty development of ovarian function.
- To regulate vascular tone and motility.

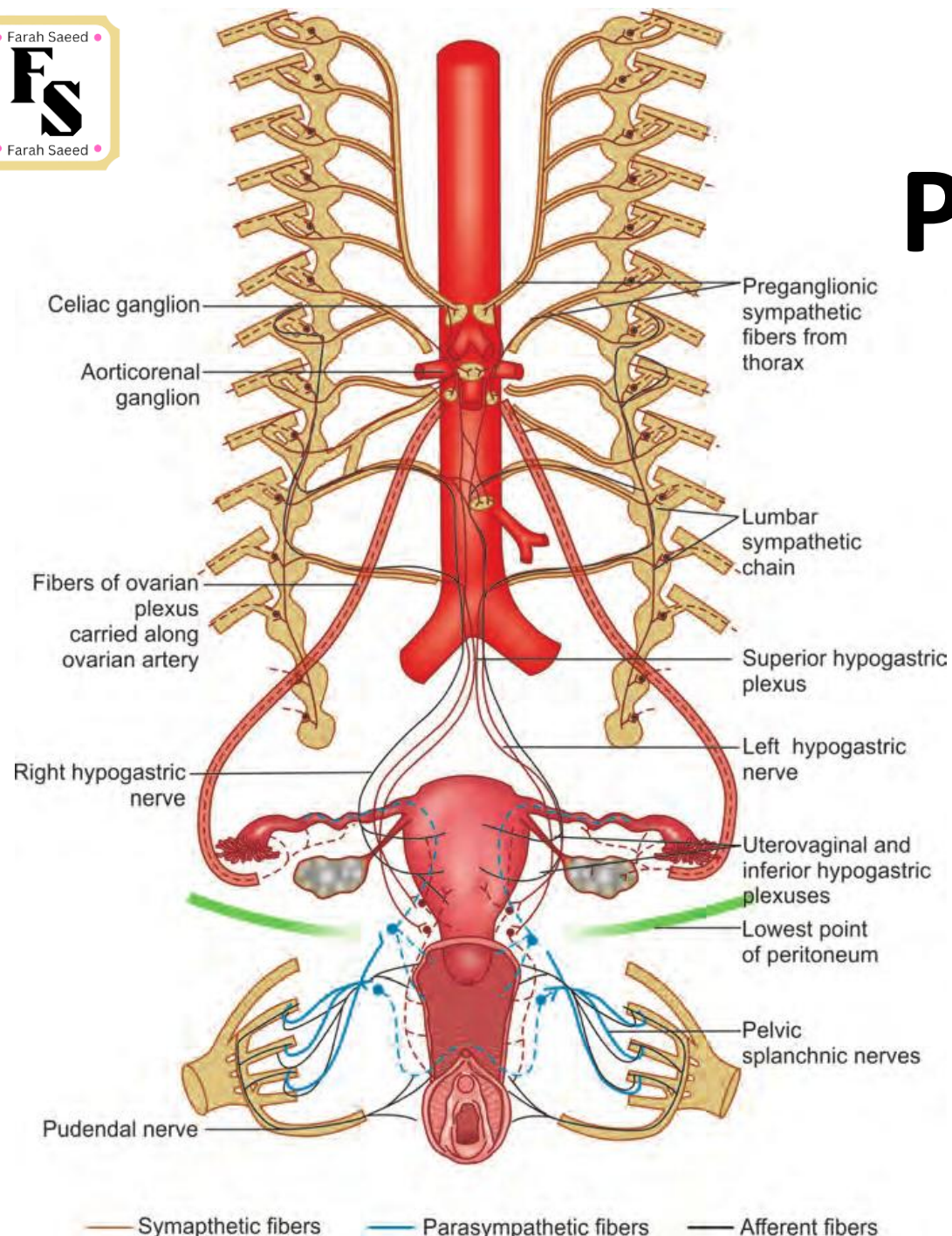


	Location of the efferent fibres	Effect
Uterus	T11 to L1 from spinal cord segments	• Contraction of Muscle. • Vasoconstriction of blood vessels
Vagina	T12 to L1 from spinal cord segments	• Contraction of the muscle and lining
Fallopian Tube	T10 to L1 from hypogastric plexus	
Ovary	T10 to L1 from hypogastric plexus	

Internal Genitalia

Parasympathetic Nerves

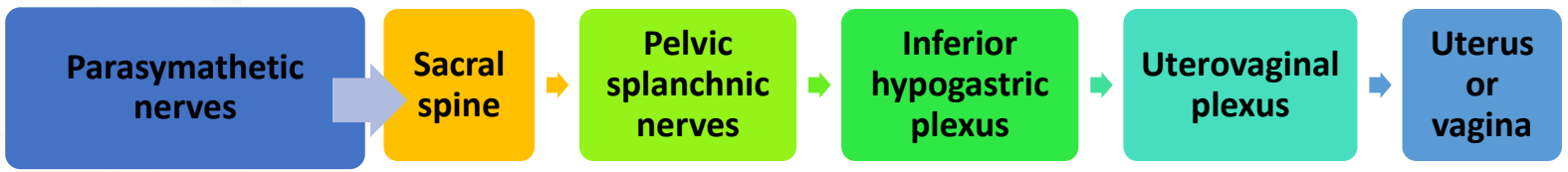
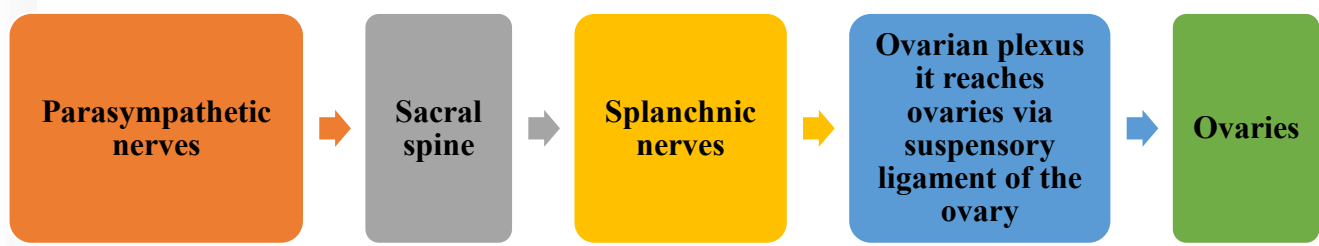
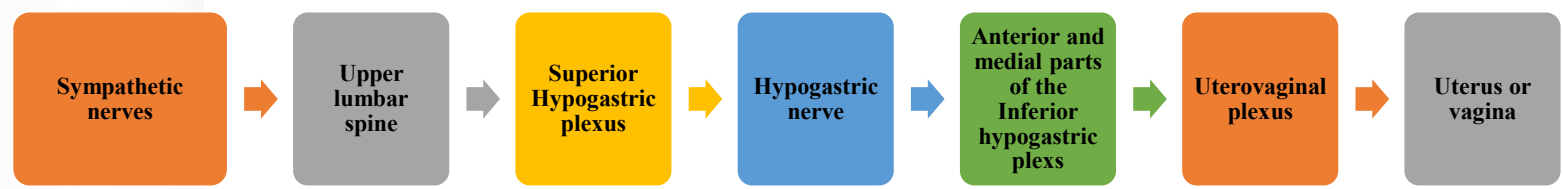
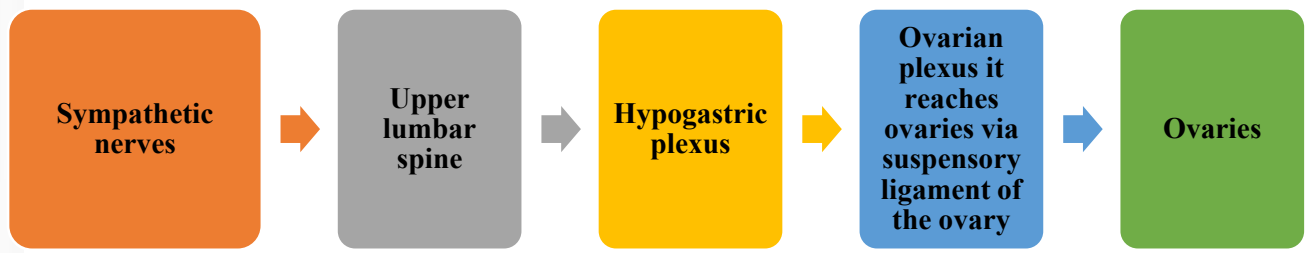
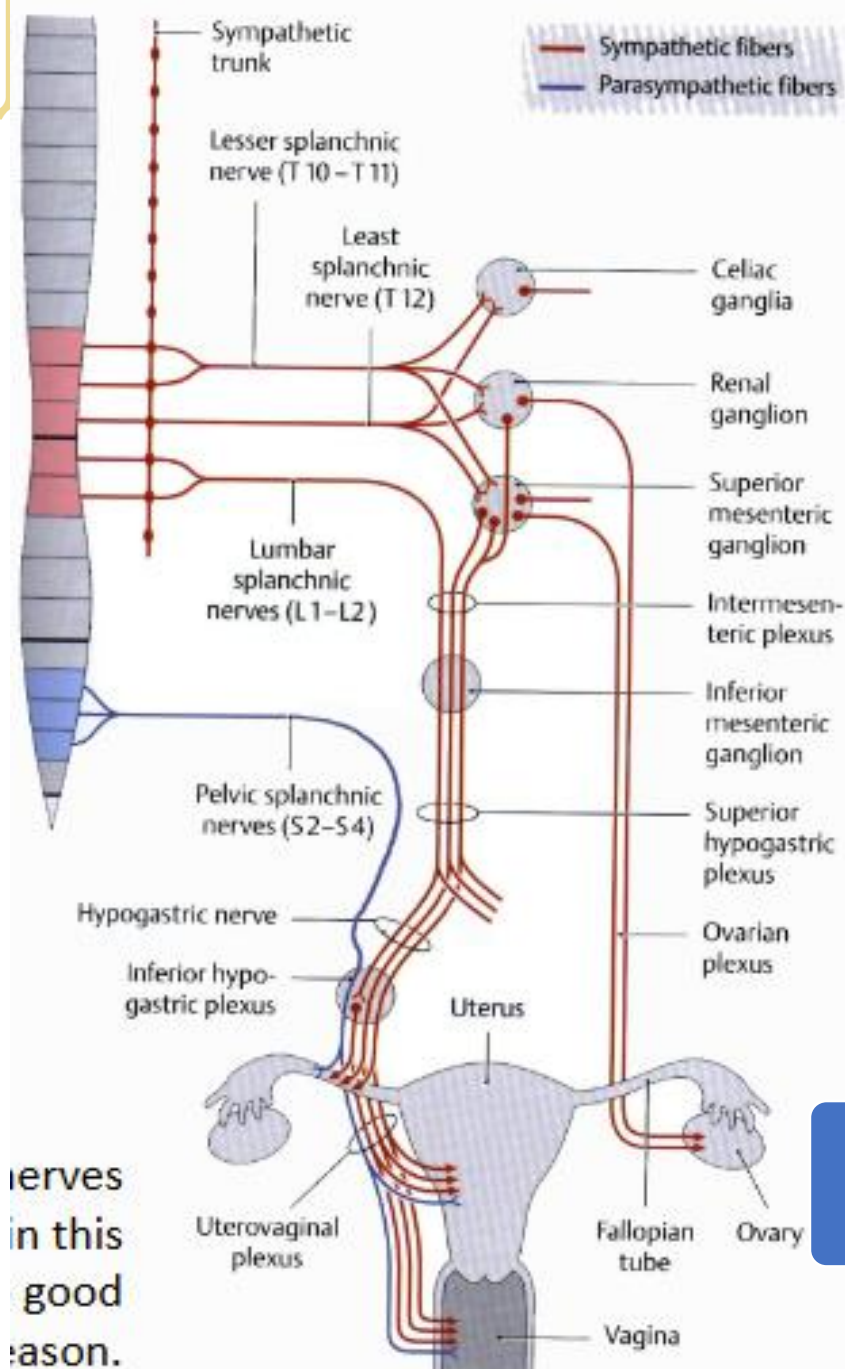
Digest or Rest Response



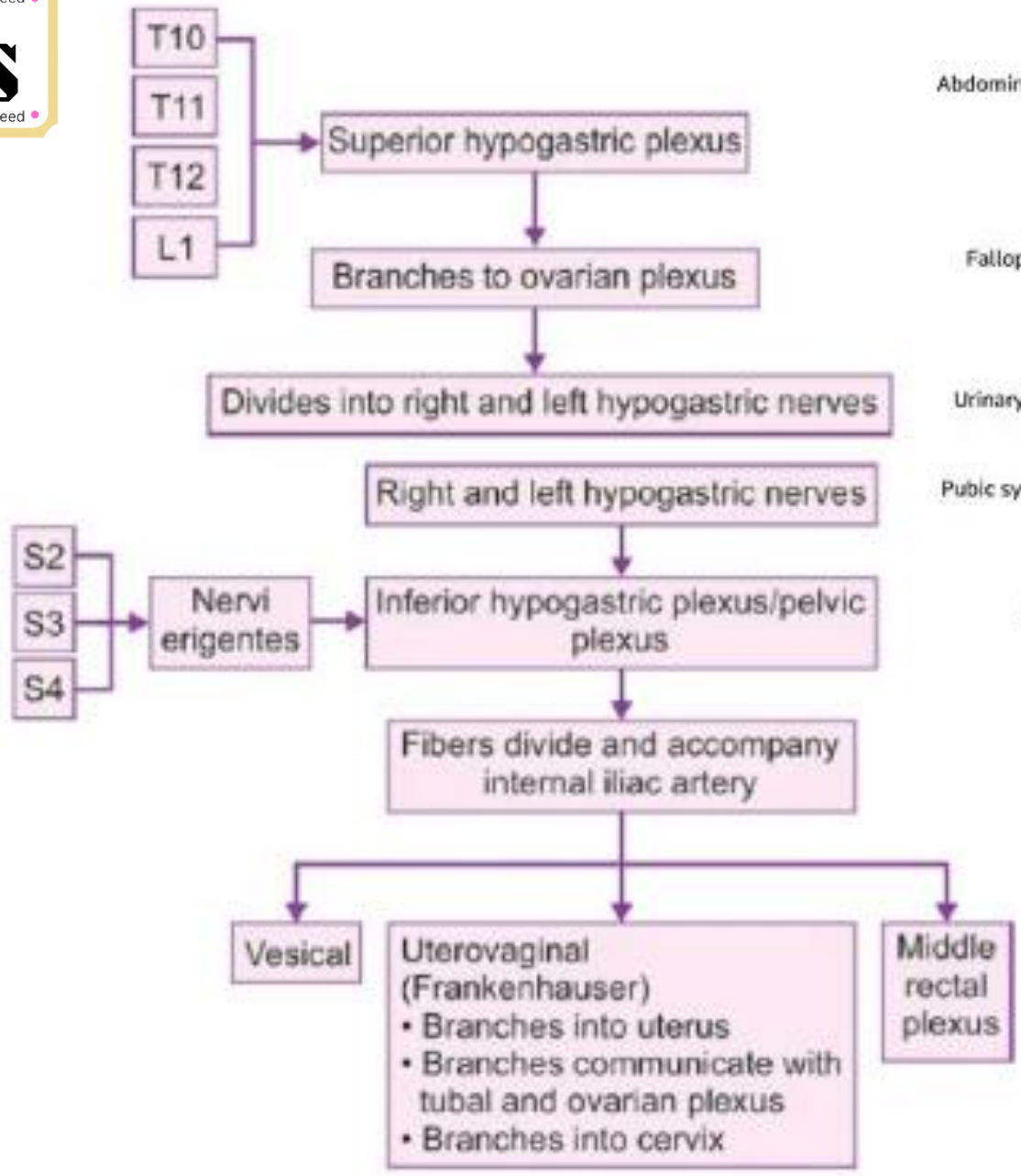
	Location of the efferent fibres	Effect
Uterus	S2 – S4 from spinal cord segments	Inhibits contraction of Muscle. Vasodilation of blood vessels
Vagina	S2 – S4 from spinal cord segments	Inhibits contract
Fallopian Tube	Pain fibres during childbirth pass through pelvic splanchnic nerves S2-S4 segments.	From pelvic splanchnic nerves and vagus nerves (S2-S4)
Ovary	Pain fibres during childbirth pass through pelvic splanchnic nerves S2-S4 segments.	From pelvic splanchnic nerves (S2-S4)

1/5th of vagina receives somatic innervation is a branch of pudendal nerve called deep perineal nerve

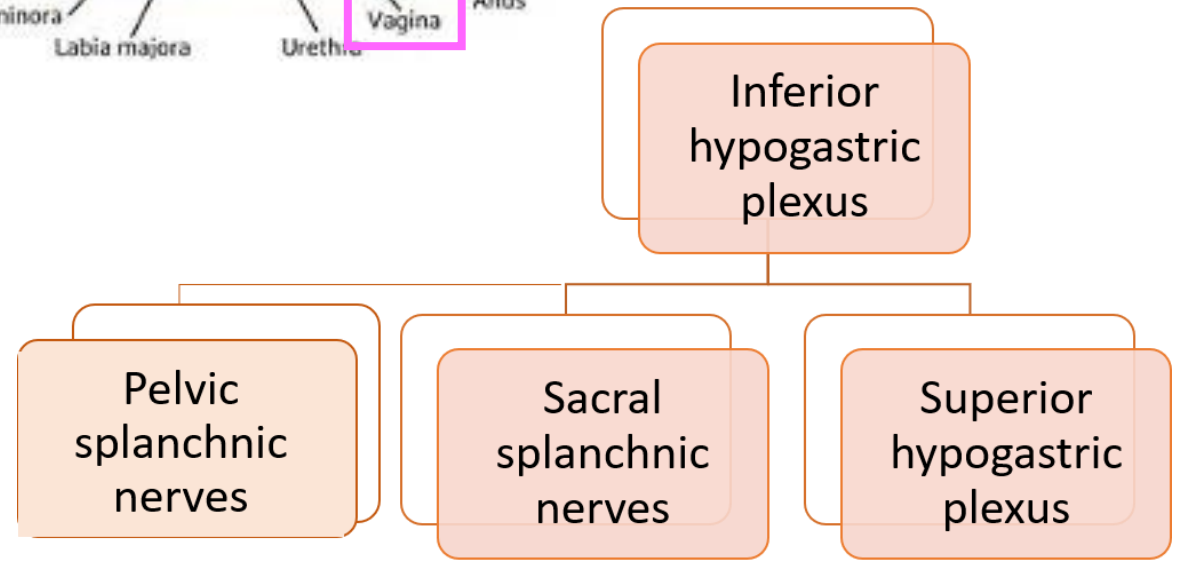
Examples of female genital nerve pathways

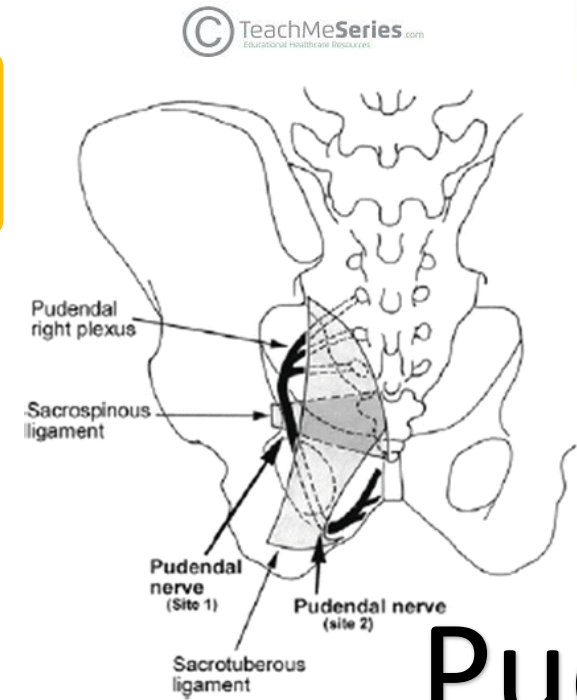
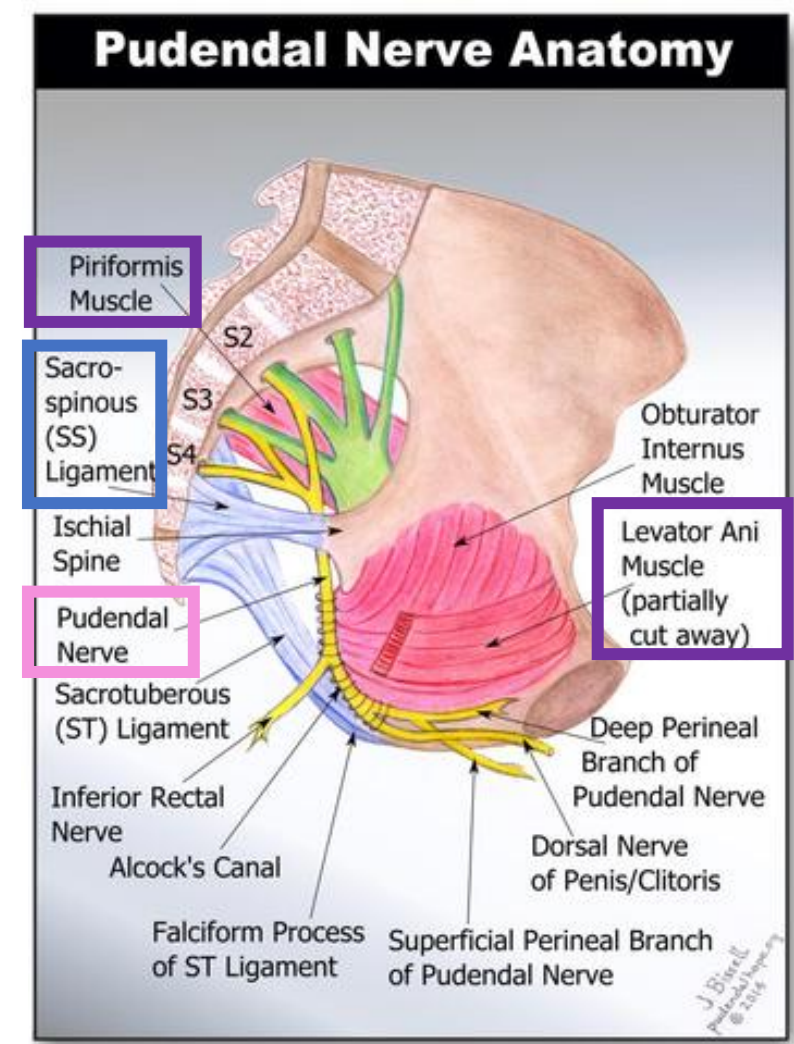
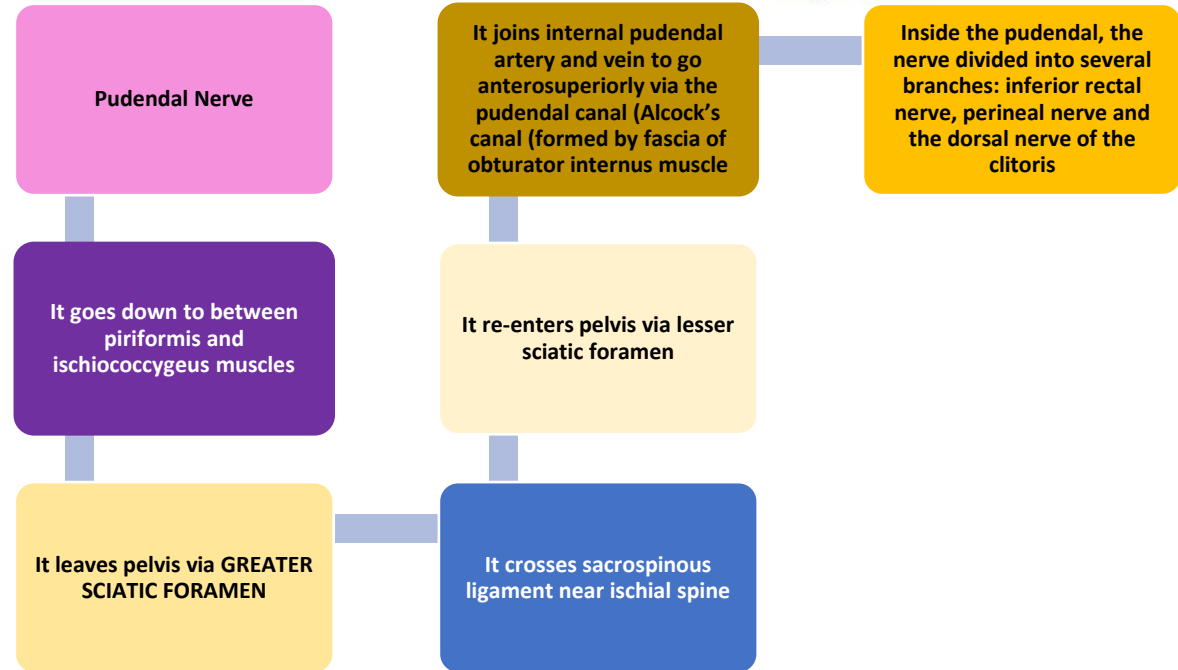
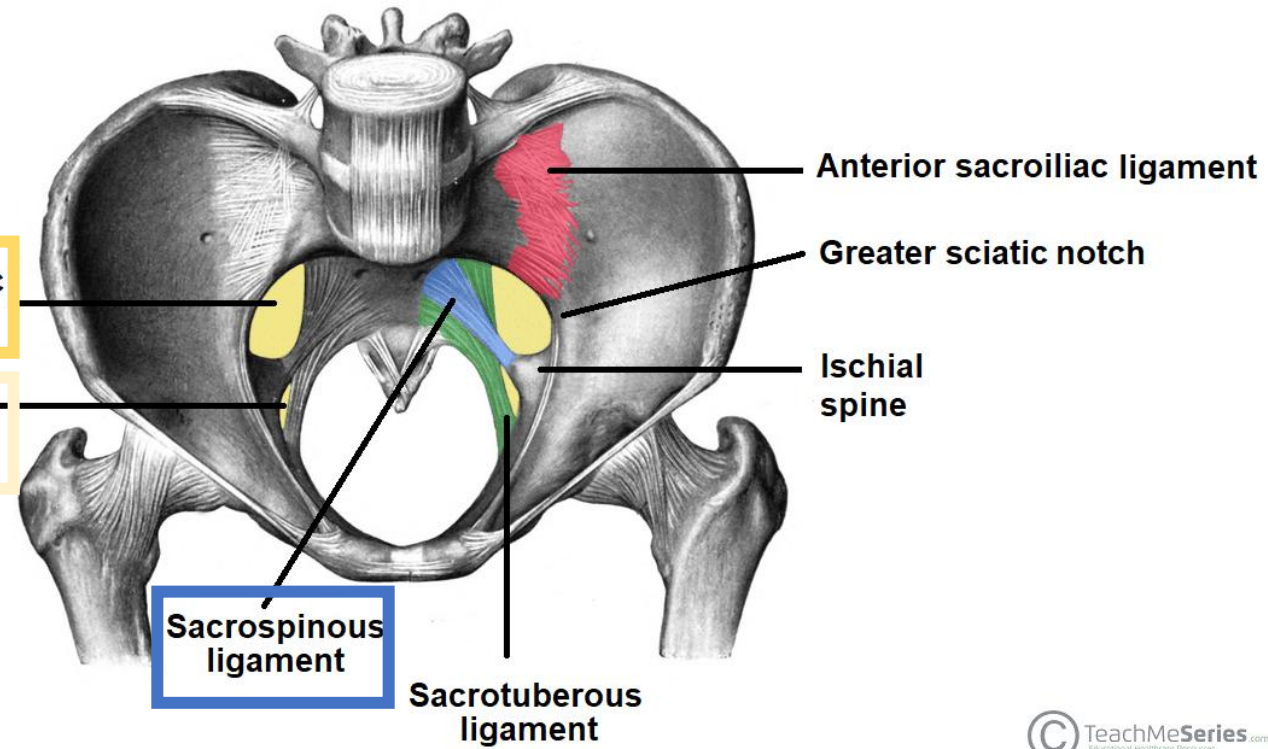


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 good
 season.



Inferior hypogastric plexus is found either side of the rectum in males and female. In addition, vagina in females.





Pudendal Nerve