

Female Perineum

General features

Diamond-shaped area whose boundaries are those of the pelvic outlet and lie between :

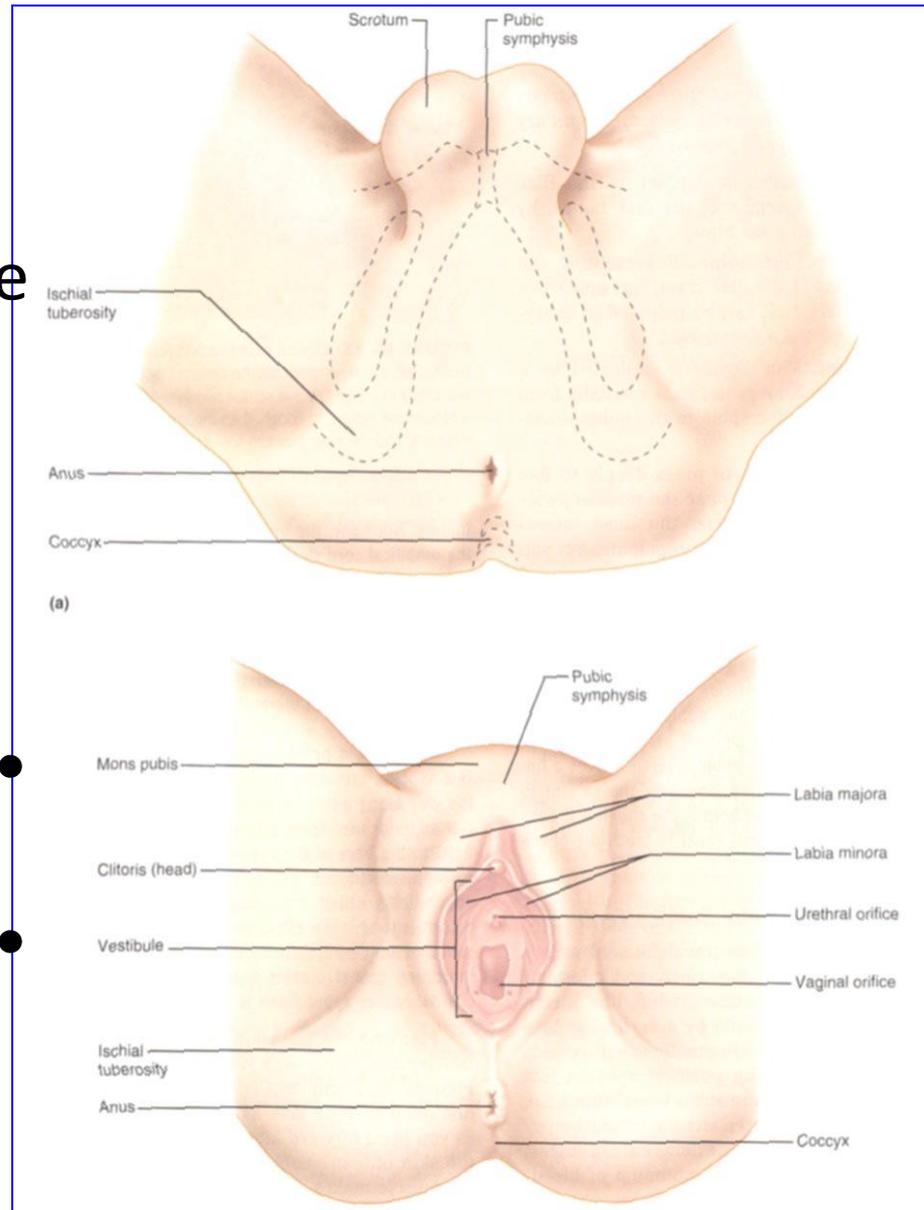
- Pubic symphysis (anteriorly) –
- Coccyx (posteriorly) –
- Ischial tuberosities (laterally) –

Male contain ●

- Scrotum, root of penis, anus –

Female contain ●

- External genitalia, anus –

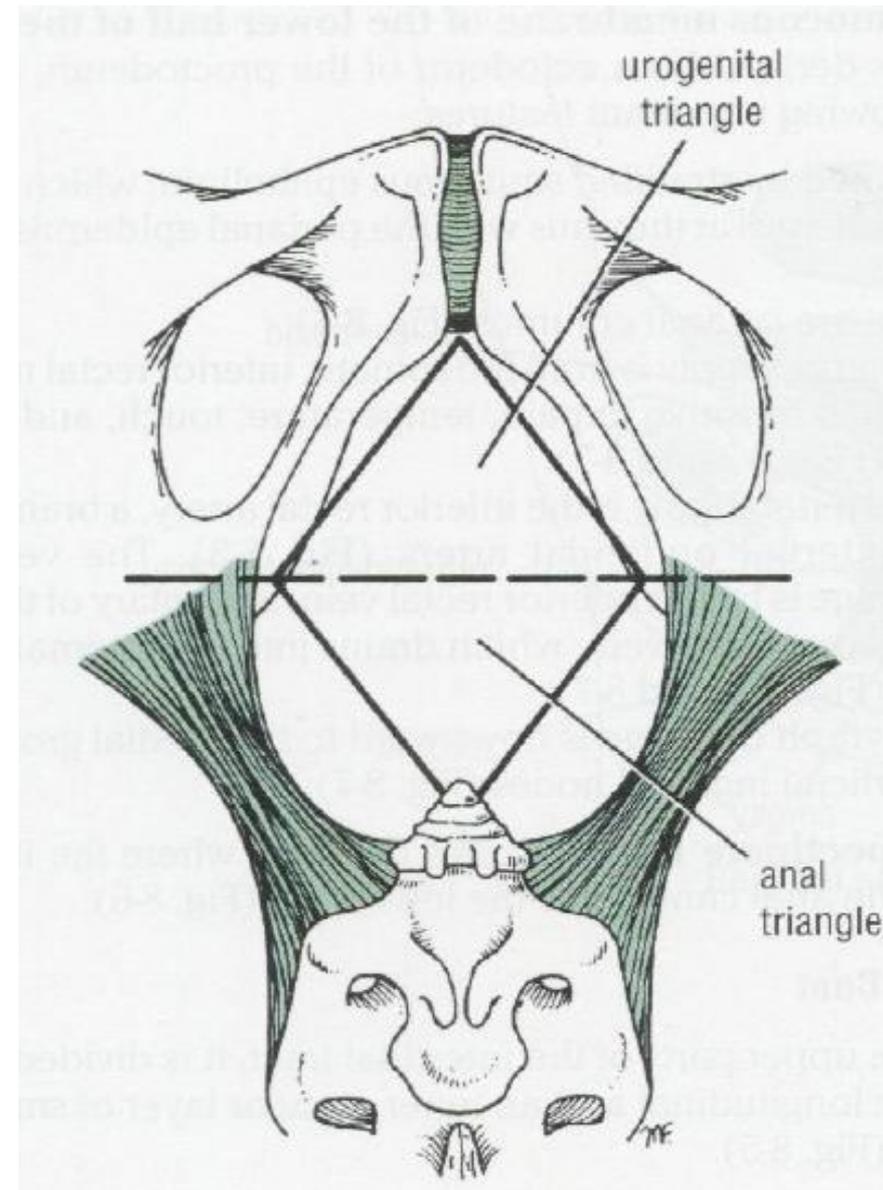


Two triangles

An imaginary line drawn between the two ischial tuberosities and passing immediately anterior to anus divides perineum into anterior and posterior triangles.

Anal region (posterior triangle) •

similar in both sexes ,it is contains the termination of anal canal in the median plane and an ischiorectal fossa on each side.

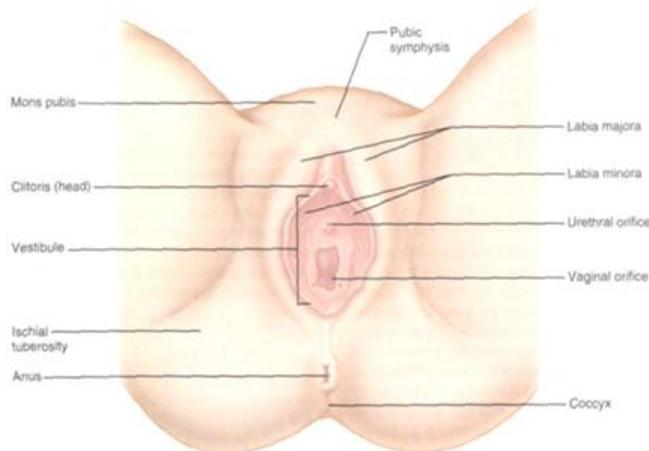
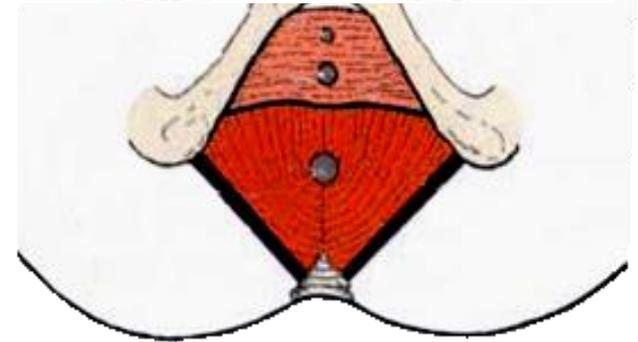
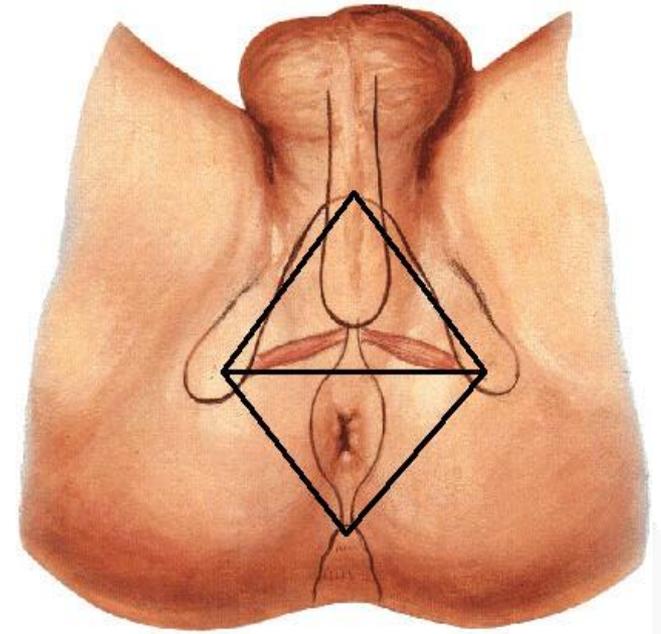


Urogenital region (anterior triangle)

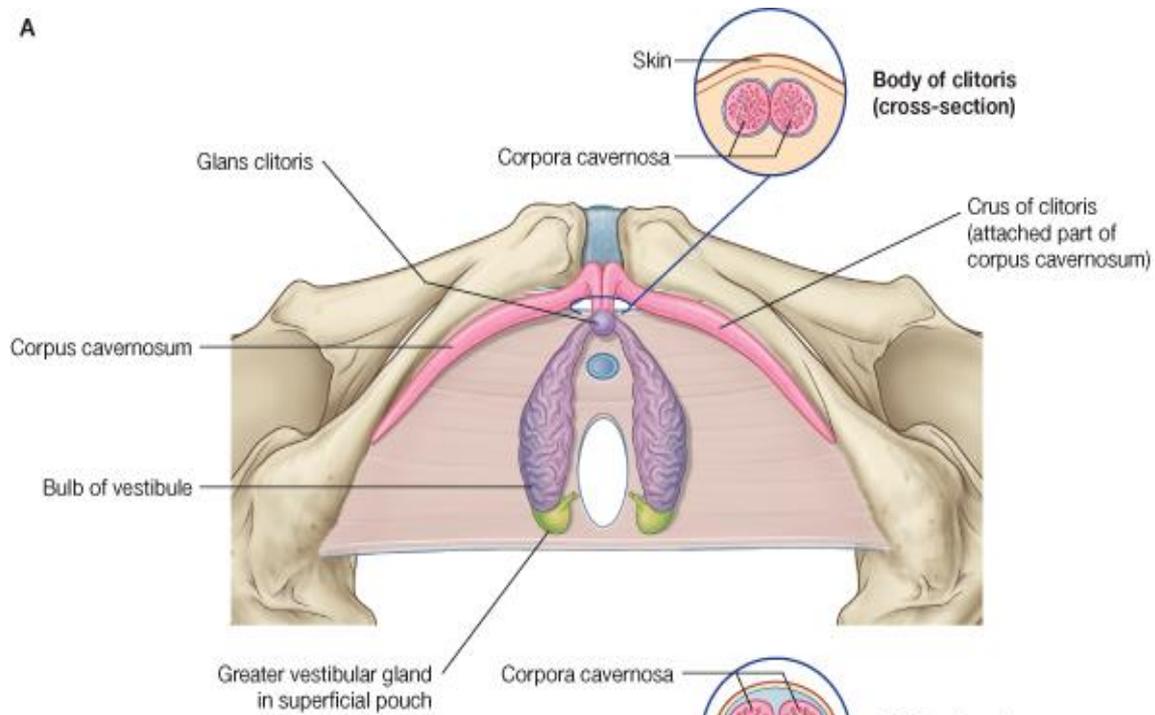
It contains in:

Males: Urethra enclosed by root of penis and partly hidden anteriorly by scrotum.

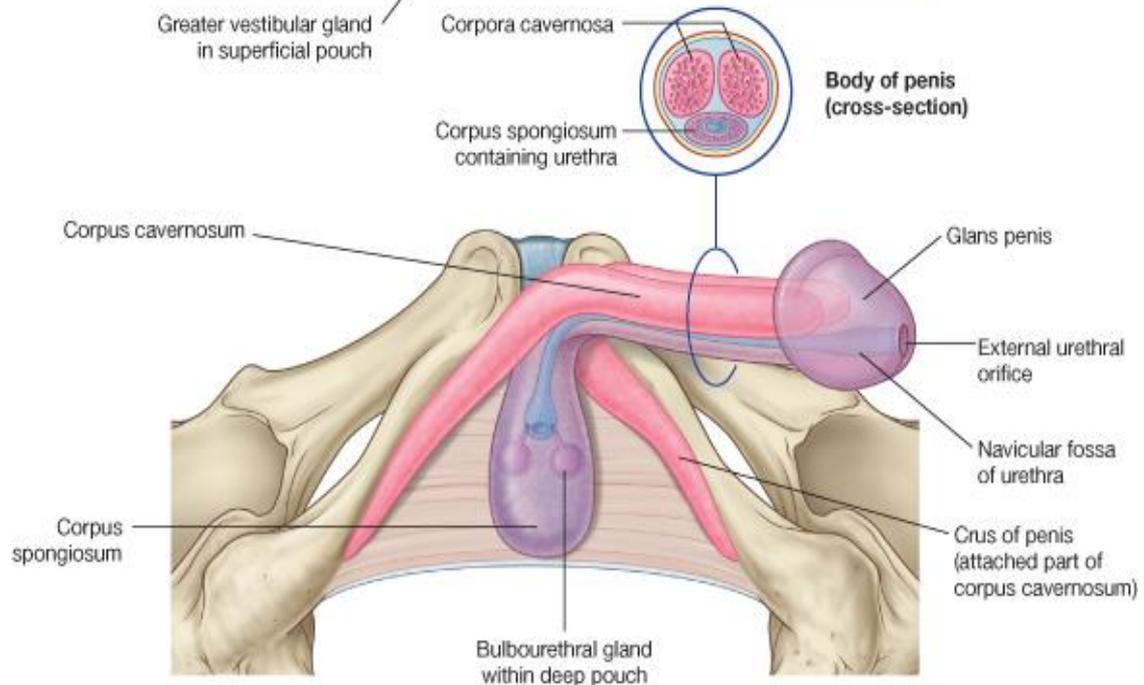
Females: the female external genital organs.



A

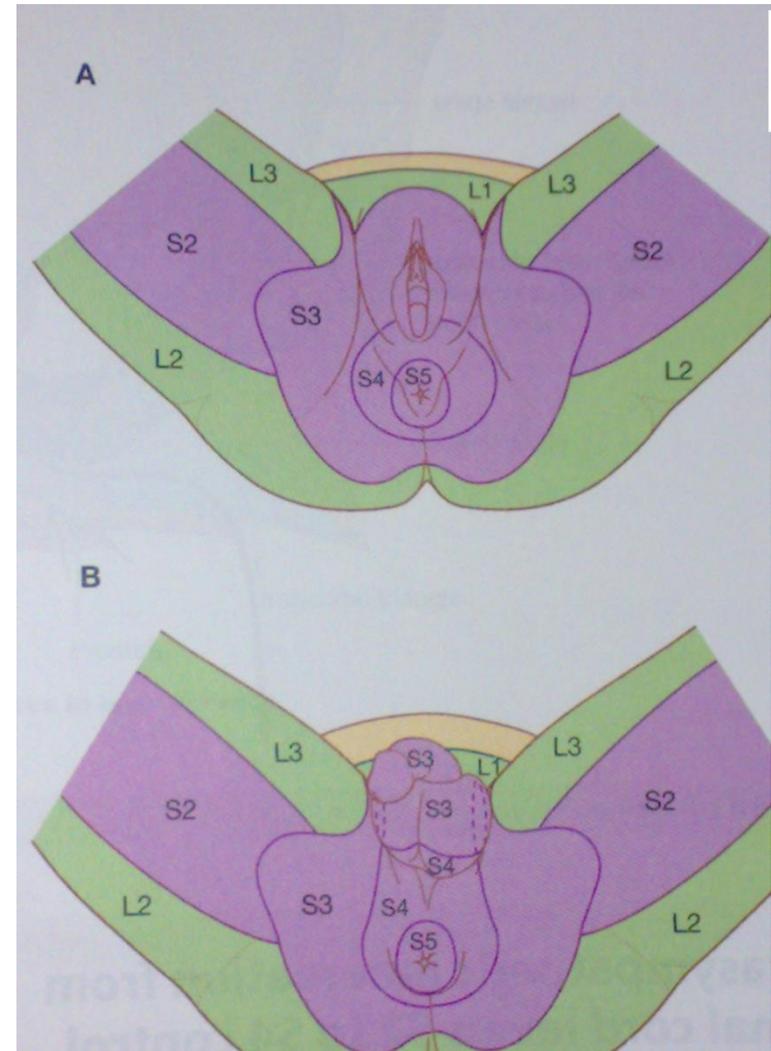


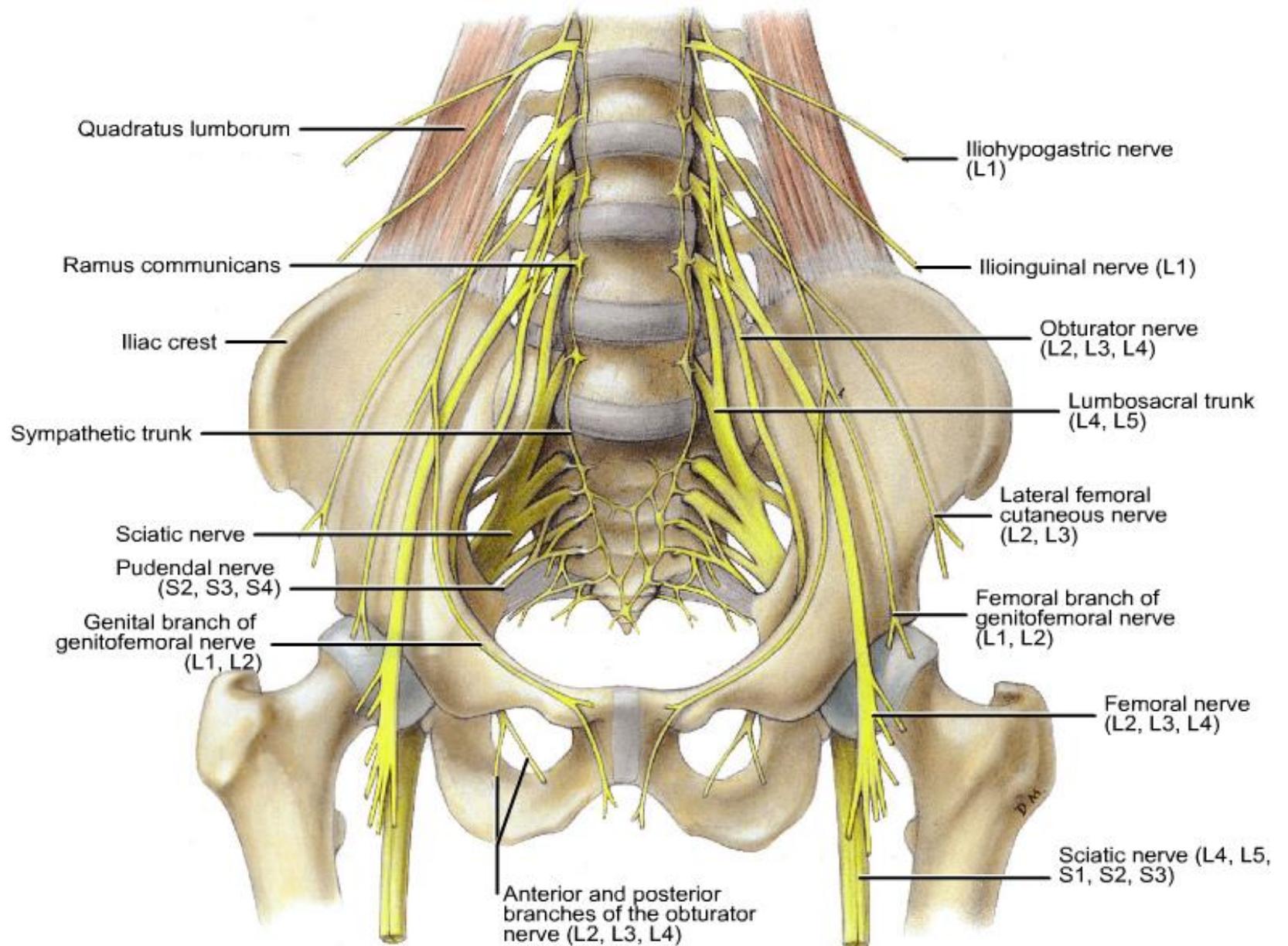
B



Superficial Perineal innervations

Dermatomes of the perineum in both sex are from spinal cord S3 - S5 , except for the anterior region, which innervated by spinal cord level L1 by nerves associated with the abdominal wall.





Anal region(Triangle)

Cutaneous innervations: *Inferior rectal nerve (S2,3,4)* • supplies the skin around the anus and over the ischiorectal fossa, and the *perineal branch of fourth sacral nerve* supplies skin posterior to anus.

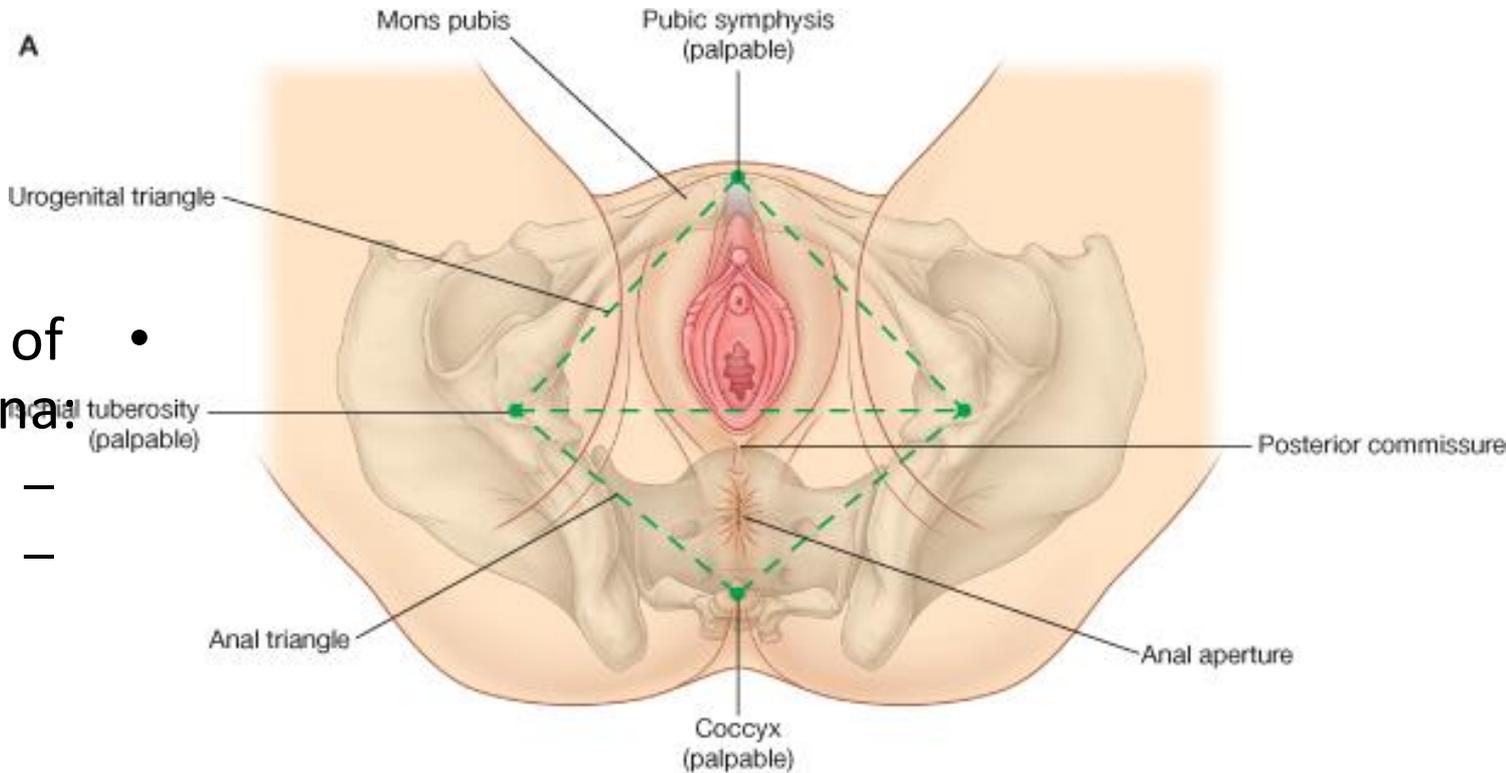
Superficial fascia: •

It contains a large amount of fat which fills the ischiorectal fossa.

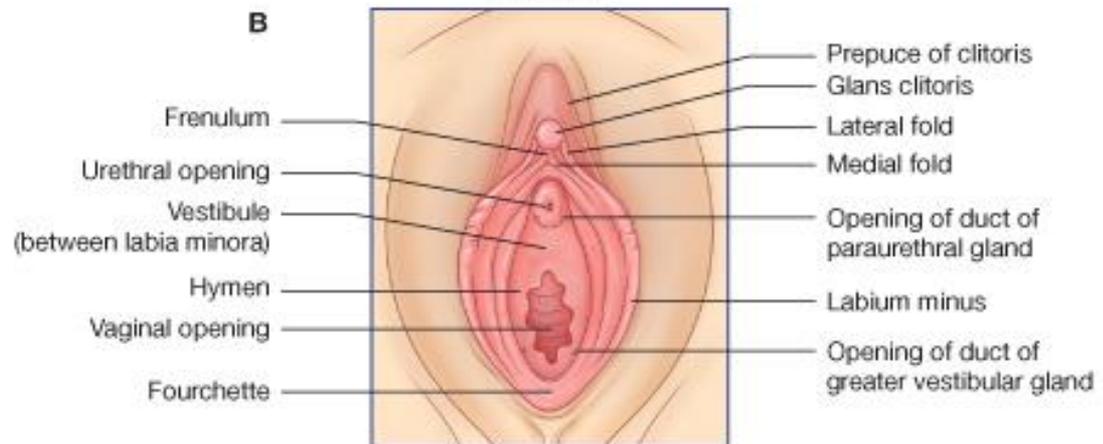
Deep fascia: •

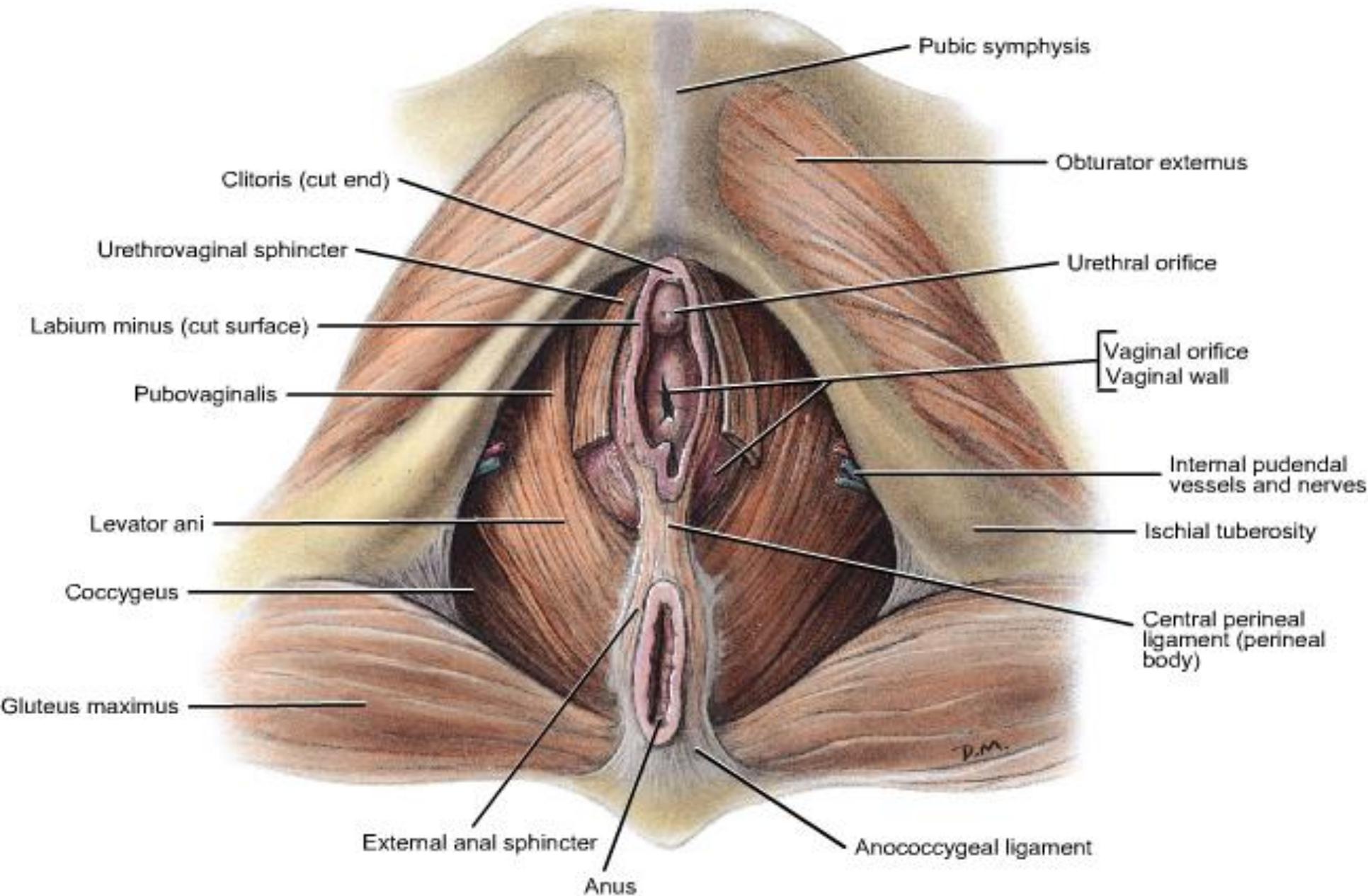
It is formed by the inferior fascia of pelvic diaphragm and the fascia covering obturator internus below the attachment of levator ani.

External female genitalia

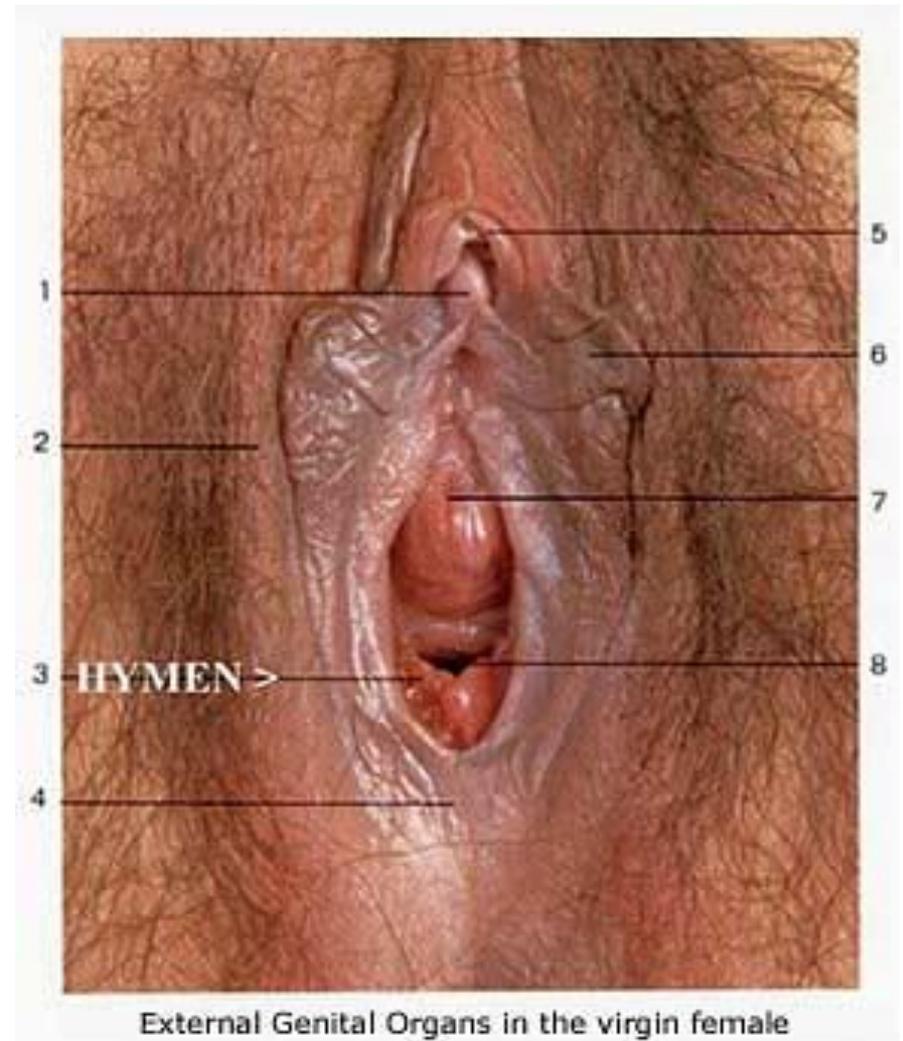


- Vestibule of vagina •
- Urethral orifice —
- Greater vestibular glands of Bartholin —
- Paraurethral glands of Skene —
- Vaginal introitus —





- 1 clitoris
- 2 Labia majora
- 3 Hymen
- 4 Fourchette
- 5 Prepuce of clitoris
- 6 labia minora
- 7 Urethral meatus
- 8 Vaginal opening



Pubic symphysis

secreting a clear or whitish mucus with lubricant properties

Superficial dorsal vein

Dorsal artery and nerve of clitoris

Clitoris

Crus of clitoris

Bulbospongiosus

Urethral orifice

Bulb of vestibule

Vaginal orifice

Branches of internal pudendal vessels

Vaginal wall

Perineal membrane

Levator ani

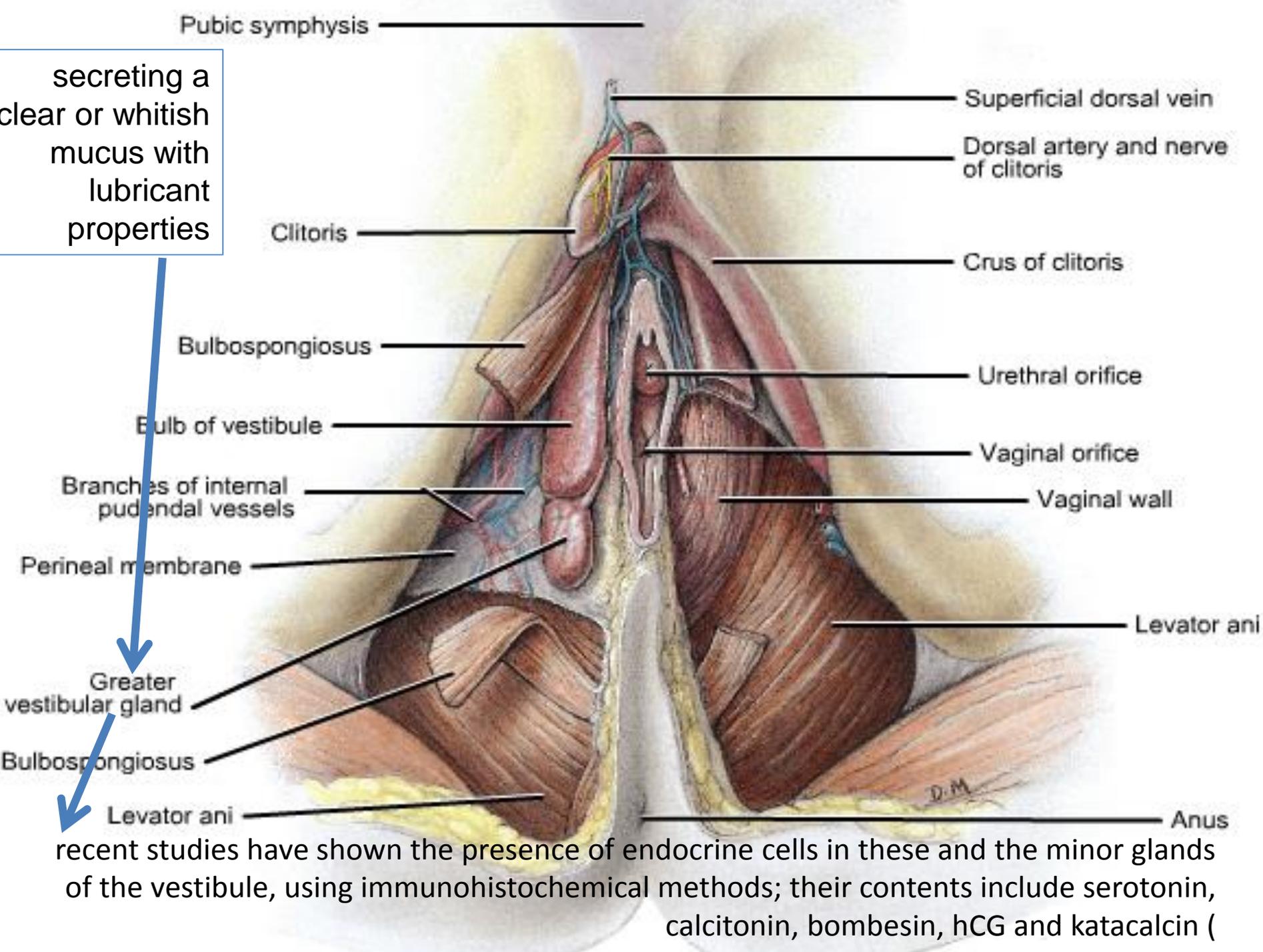
Greater vestibular gland

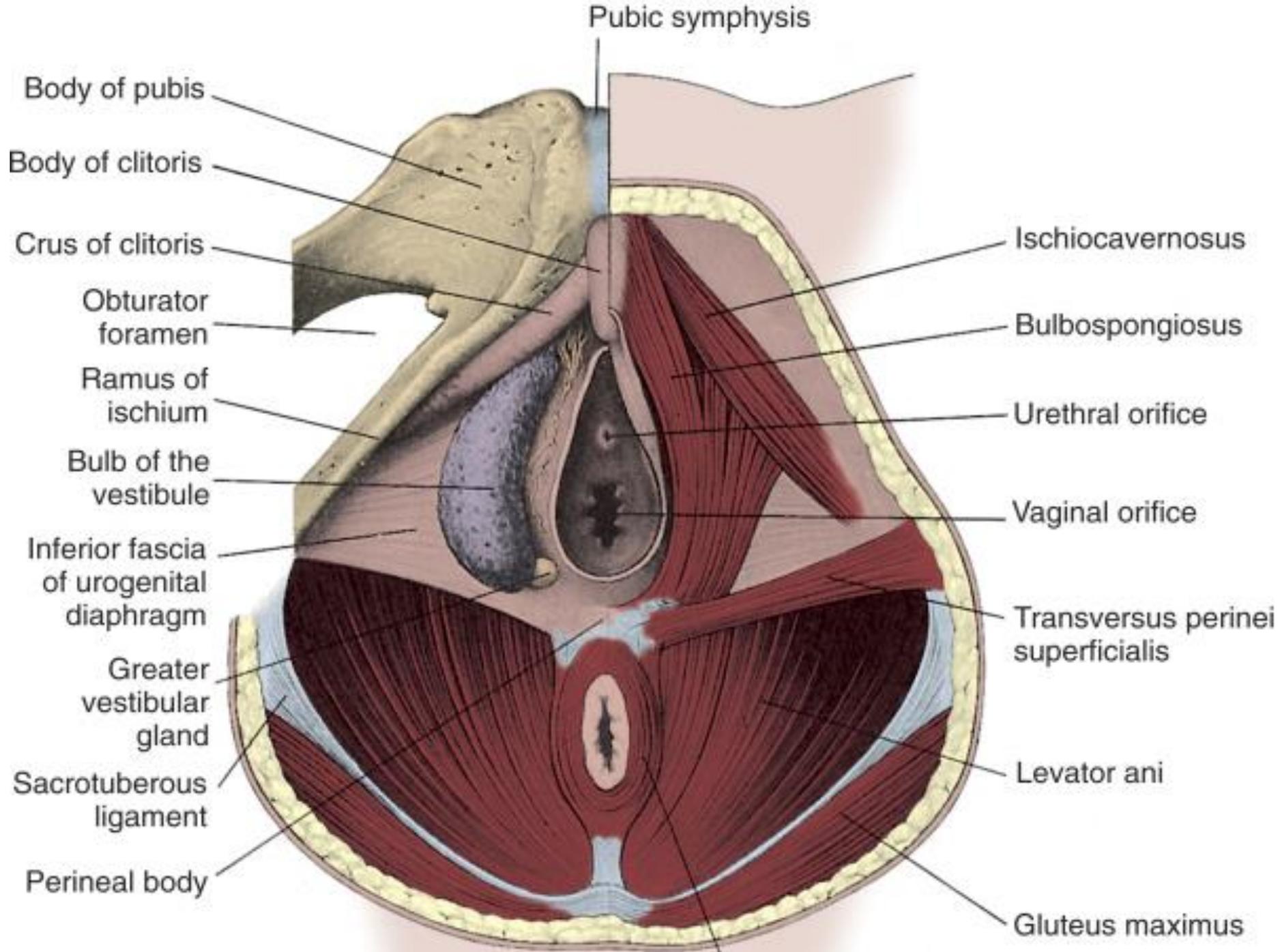
Bulbospongiosus

Levator ani

Anus

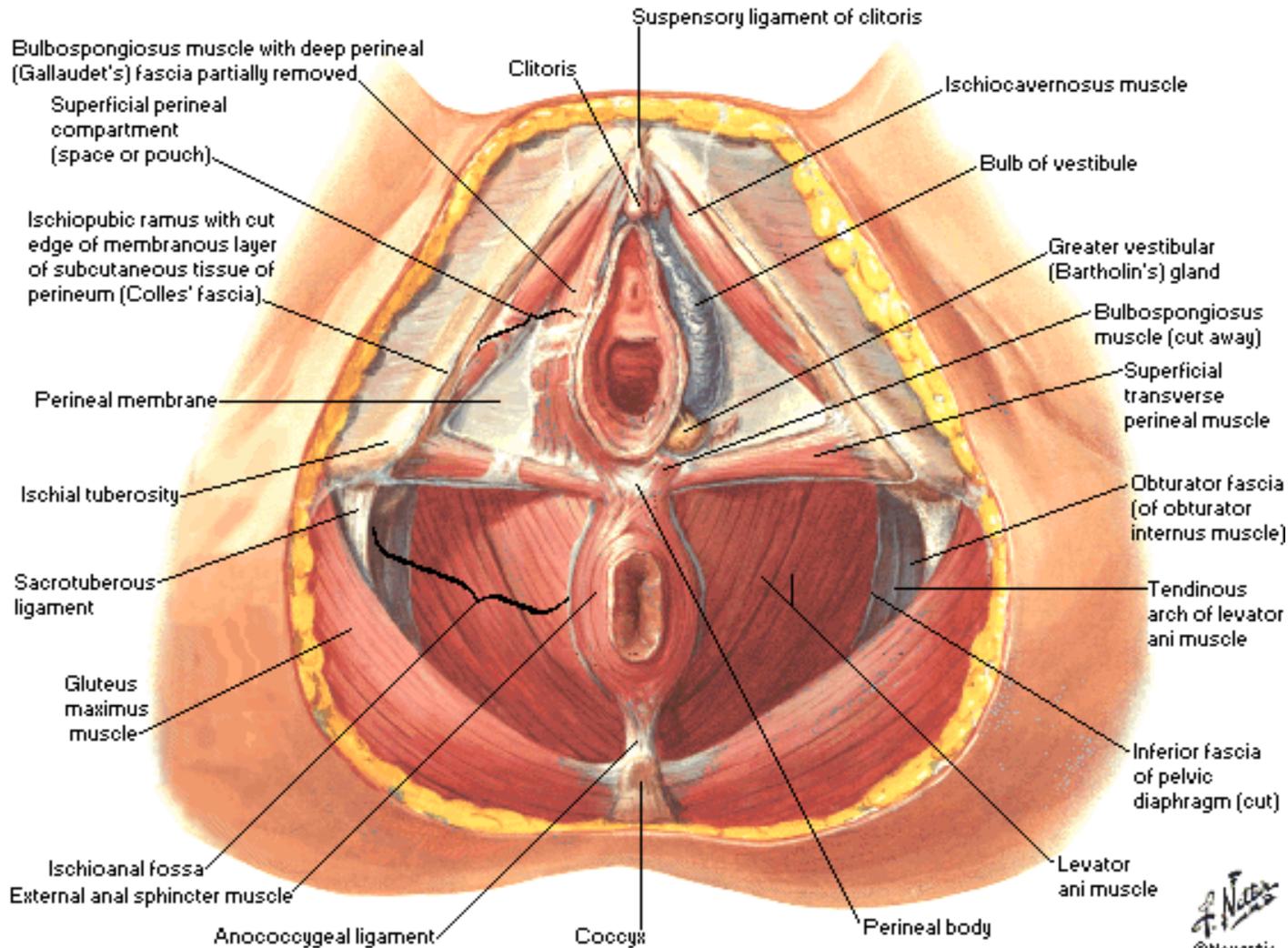
recent studies have shown the presence of endocrine cells in these and the minor glands of the vestibule, using immunohistochemical methods; their contents include serotonin, calcitonin, bombesin, hCG and katacalcin (

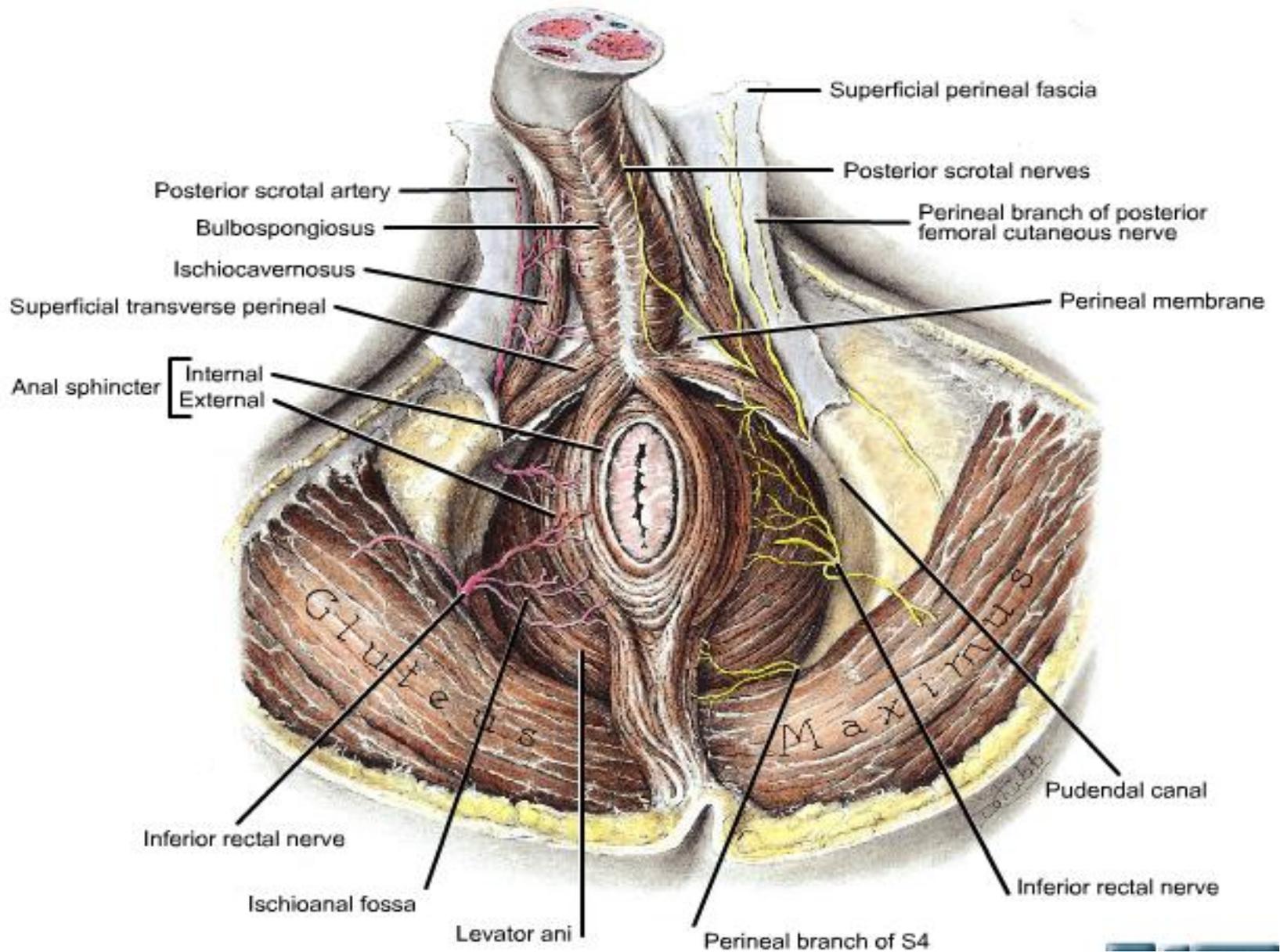




Muscles - Female

Perineum and Urogenital Diaphragm of Female

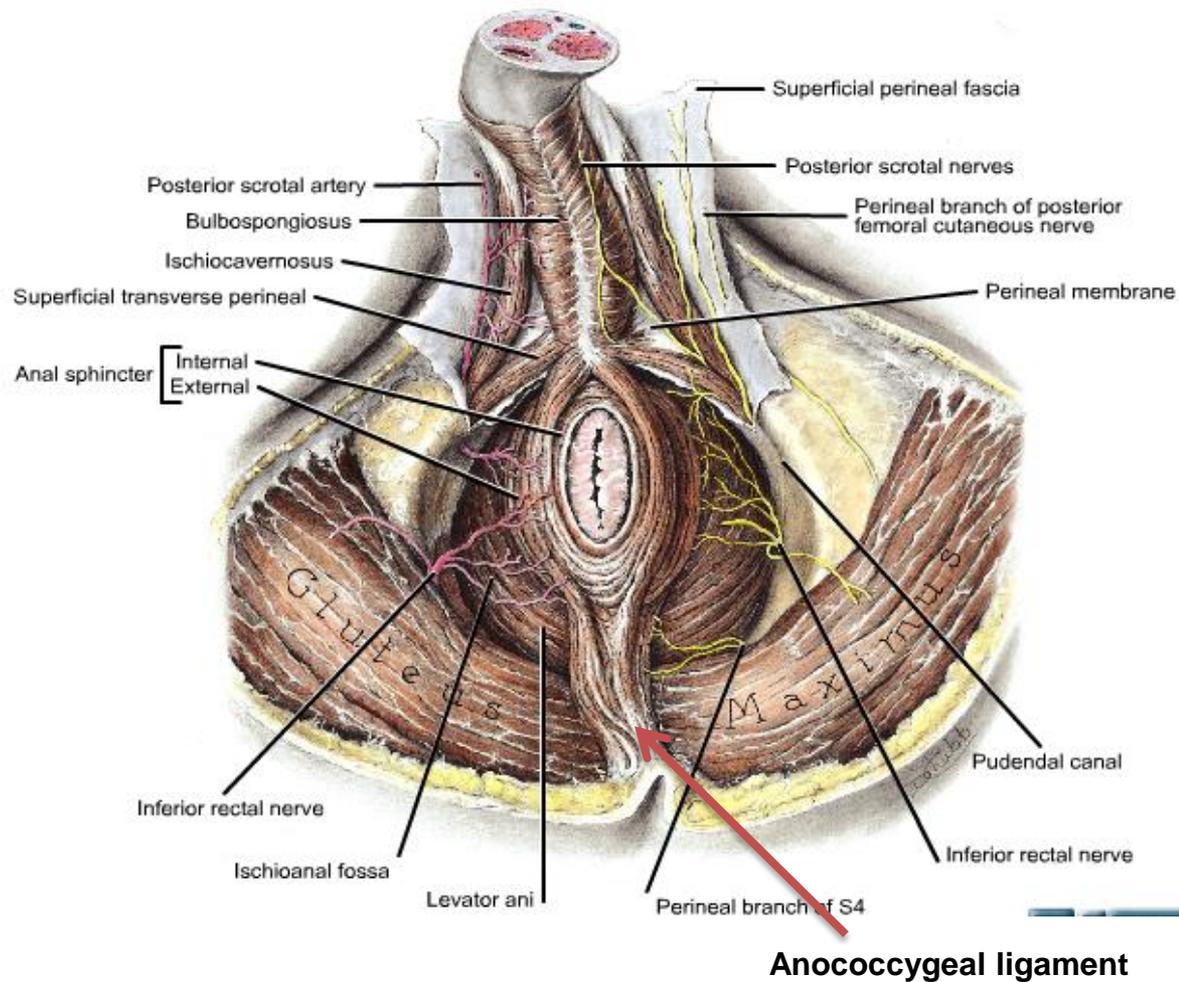




Anal region, cont.

Anococcygeal ligament:

It is a fibrofatty m permeated with muscle fibers from the levator ani and external anal sphincter. It extends from the anus to the tip of the coccyx and supports the rectum.



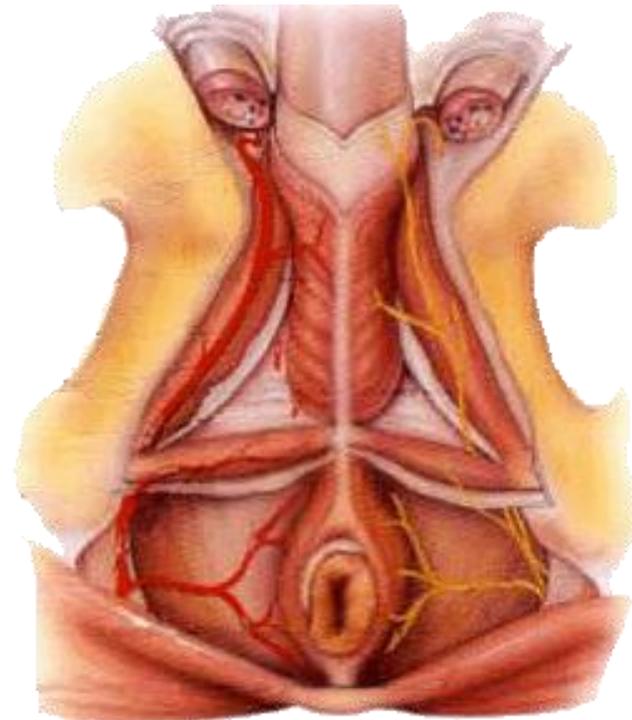
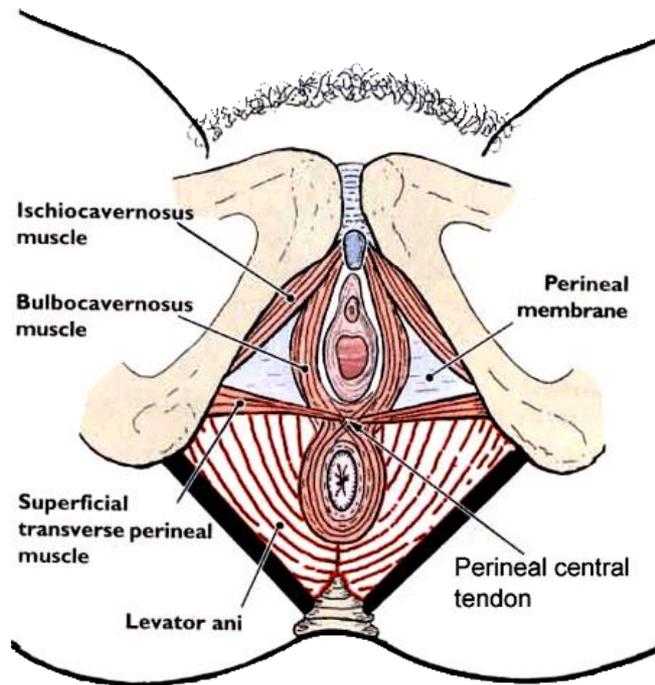
Perineal central tendon (perineal body)

Wedge-shape fibromuscular mass •

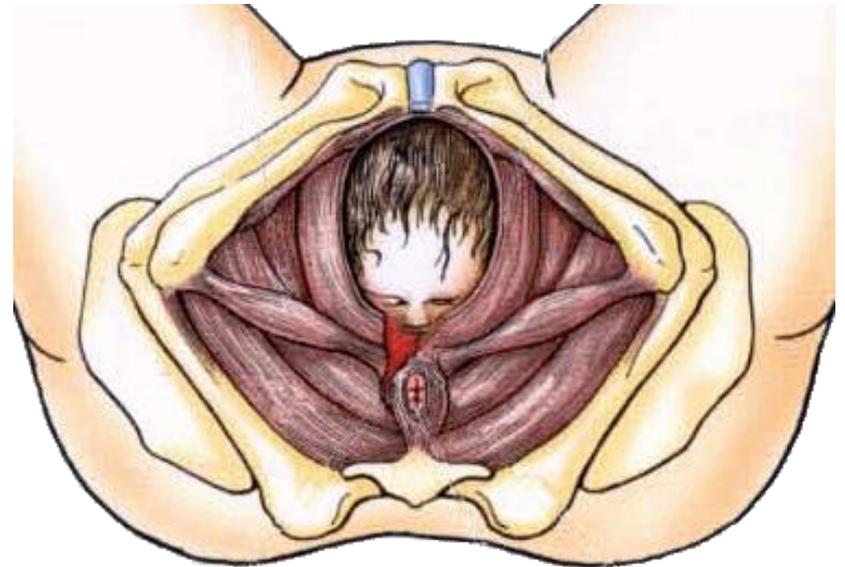
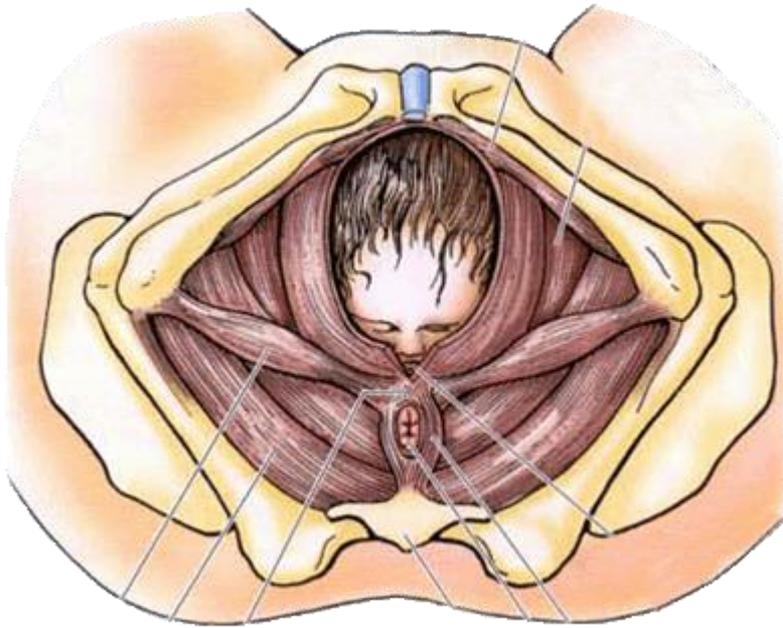
In female, between anal canal and lower end of vagina, •

In male, between anal canal and root of penis •

It is larger in the female than in the male and give support to the posterior wall of the vagina •



Perineal body is very important in females for the support of pelvic organs. Its involvement in perineal tear during delivery may result in prolapse of urinary bladder, uterus, ovaries and even rectum.



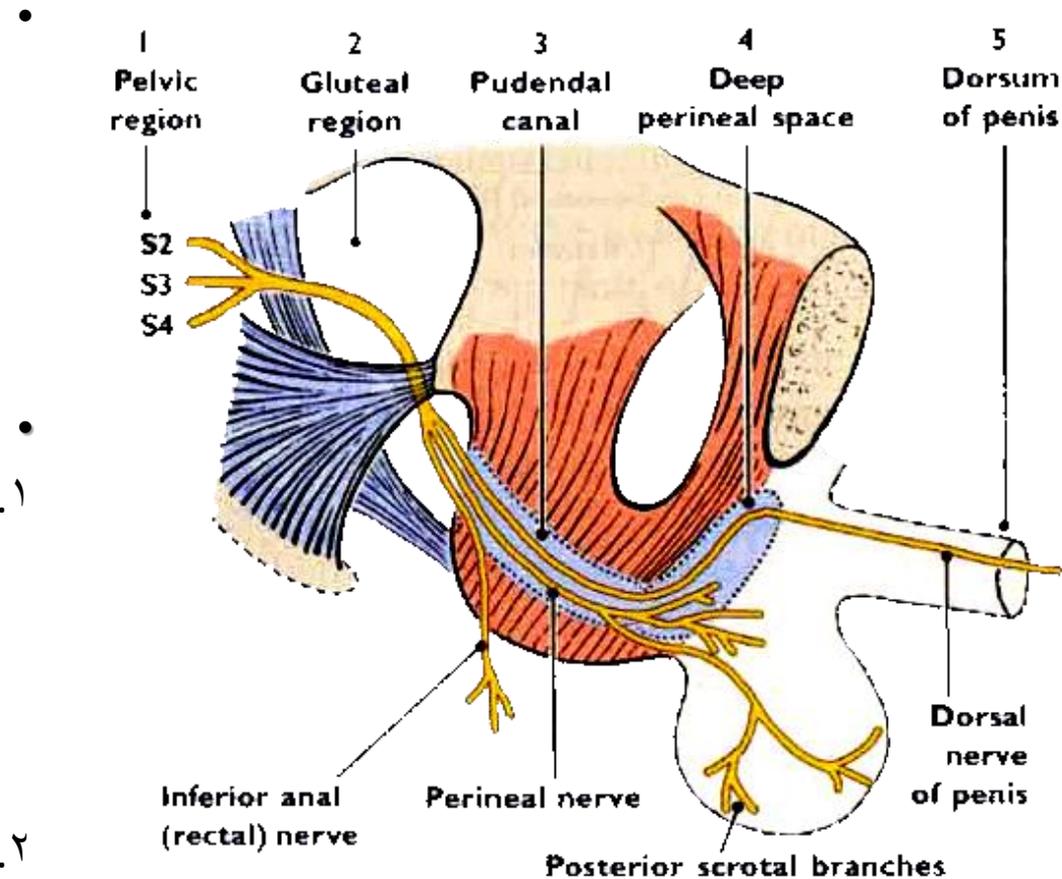
Pudendal canal

It is also called Alcock's canal, It is a fascial tunnel in the lateral wall of ischiorectal fossa, just above the sacrotuberous ligament. The canal extends from the lesser sciatic notch to the posterior border of perineal membrane.

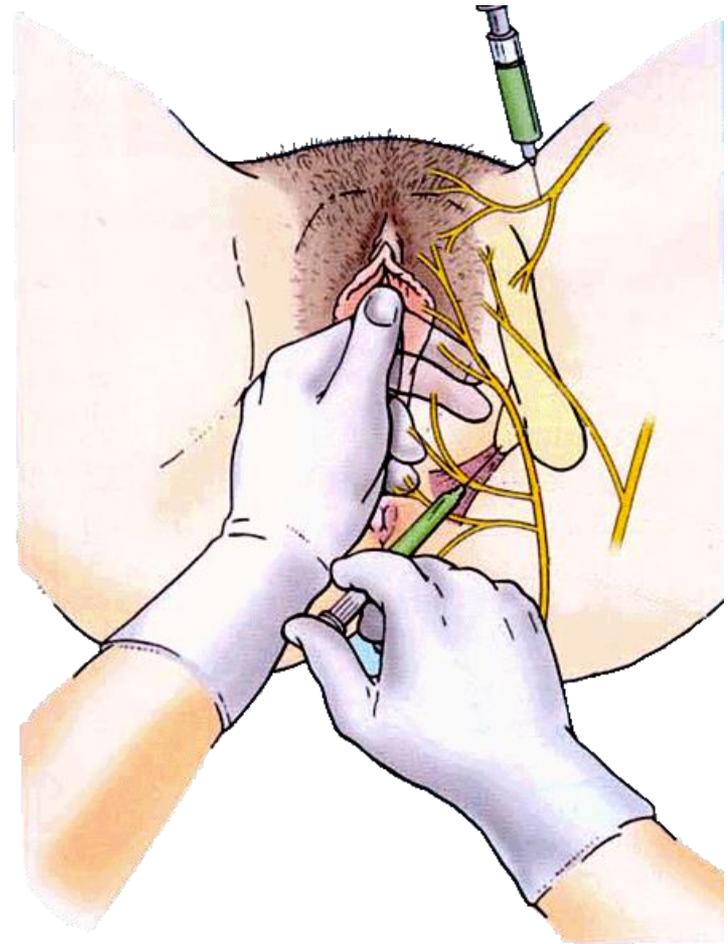
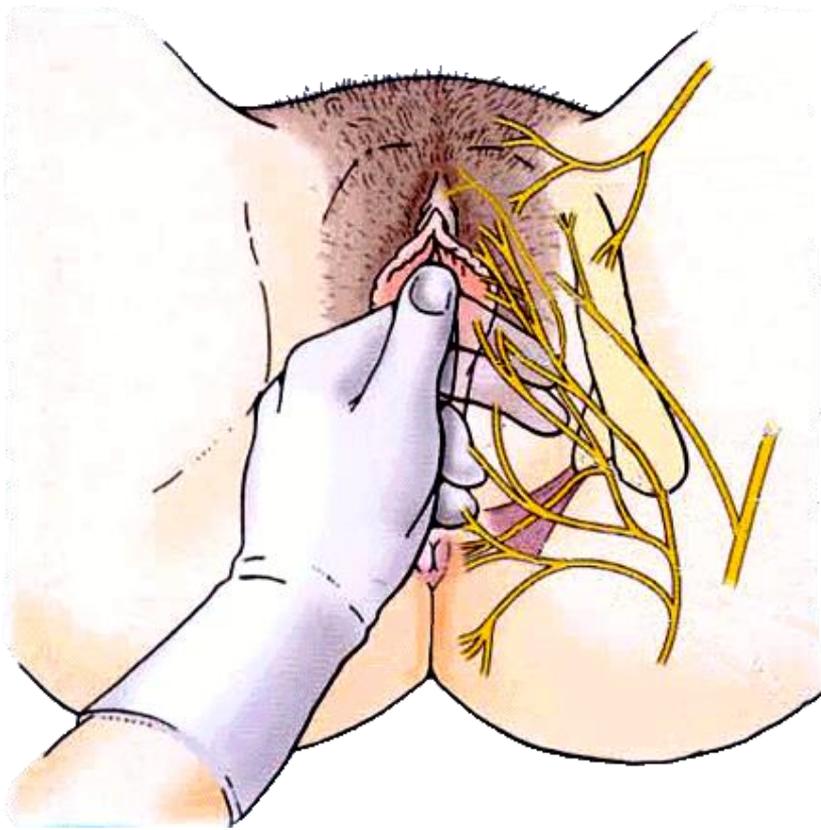
Contents:

Pudendal nerve (S2,3,4) in the posterior part of the canal, pudendal nerve gives off the inferior rectal nerve and then soon divides into a larger perineal nerve and a smaller dorsal nerve of penis.

Internal pudendal vessels.



Pudendal nerve block



Urogenital region

Cutaneous innervations: •

1. **Dorsal nerve of penis** (or of clitoris) supplies skin of the penis (clitoris) except at its root.

2. **Ilioinguinal and genital branch of genitofemoral nerve.** Supply the skin of the ant 1/3 of scrotum (labia majora) and root of the penis.

3. **Perineal branch of posterior cutaneous nerve of thigh**, supplies skin of the lateral part of urogenital region and lateral part of the post 2/3 of scrotum (labia majora).