

GENITAL ORGANS

THE MALE INTERNAL GENITAL ORGANS

- **The testis**
- **The epididymis**
- **The ductus (vas) deferens**
- **The seminal vesicles**
- **The ejaculatory ducts**
- **The prostate gland**
- **The bulbourethral gland**

THE MALE EXTERNAL GENITAL ORGANS

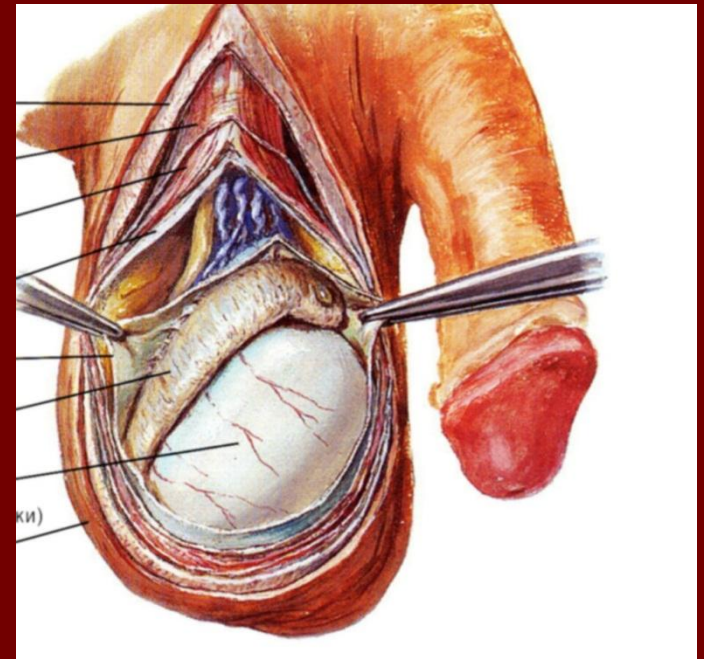
- the penis
- the scrotum
- the spermatic cord

The testis

- **The exocrine function means producing male genital cells – spermatozoa**
- **The endocrine function means producing testosterone (male sexual hormone)**

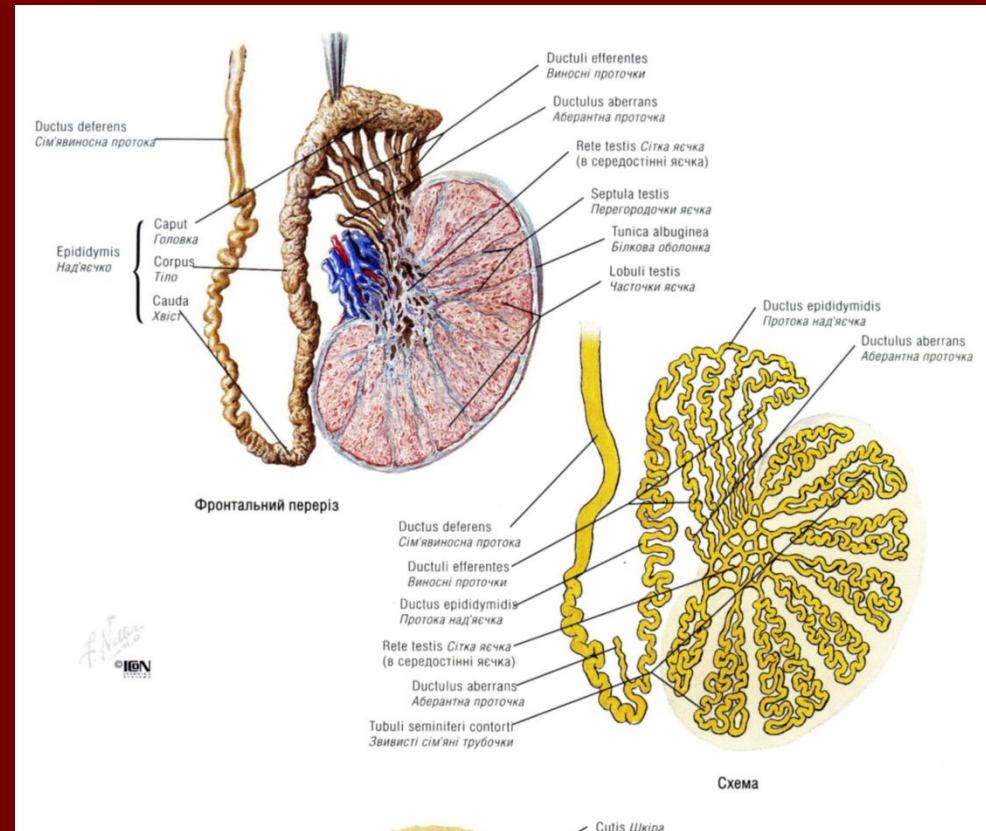
The testis

- **Two surfaces:**
medial and lateral
- **Two borders:**
anterior and posterior
- **Two poles:**
superior and inferior



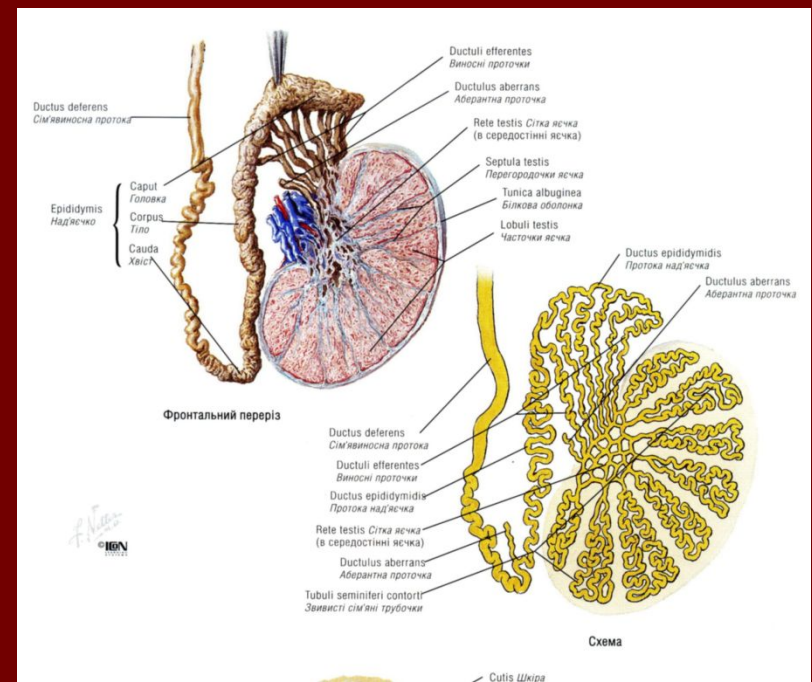
The testis

- tunica albuginea
- mediastinum testis
- septa (trabeculae)
- lobules



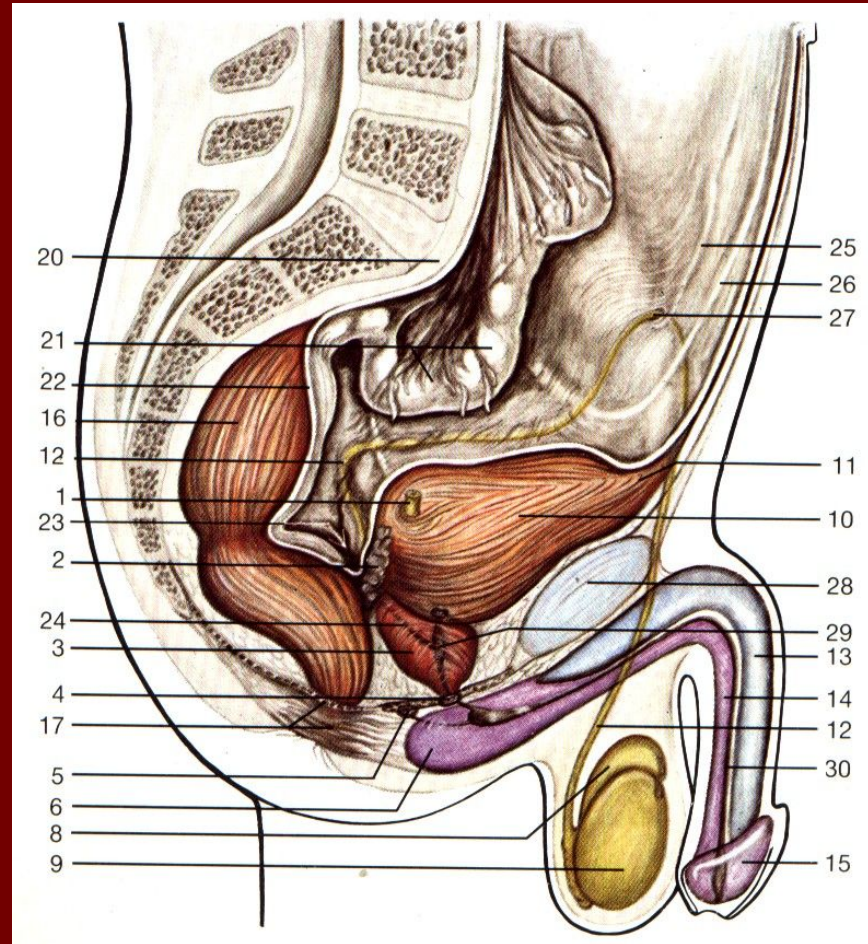
Canaliculi of the testis

- convoluted seminiferous tubules
- straight seminiferous tubules
- network of the testis
- efferent ductules of the testis



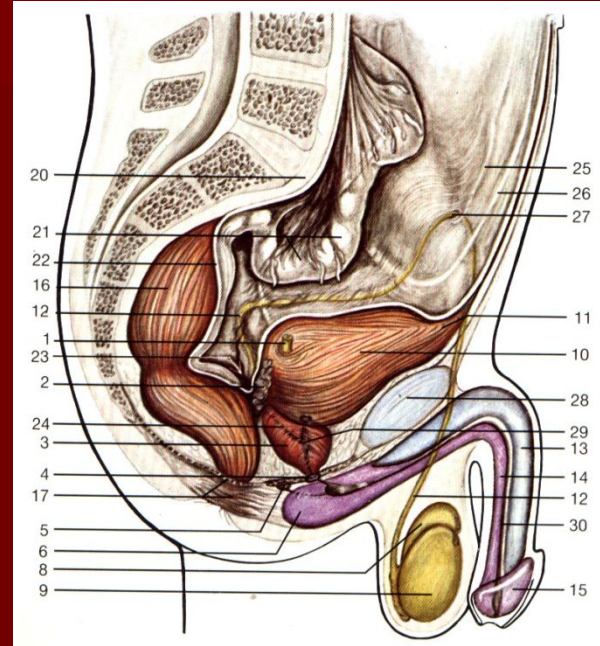
The epididymis

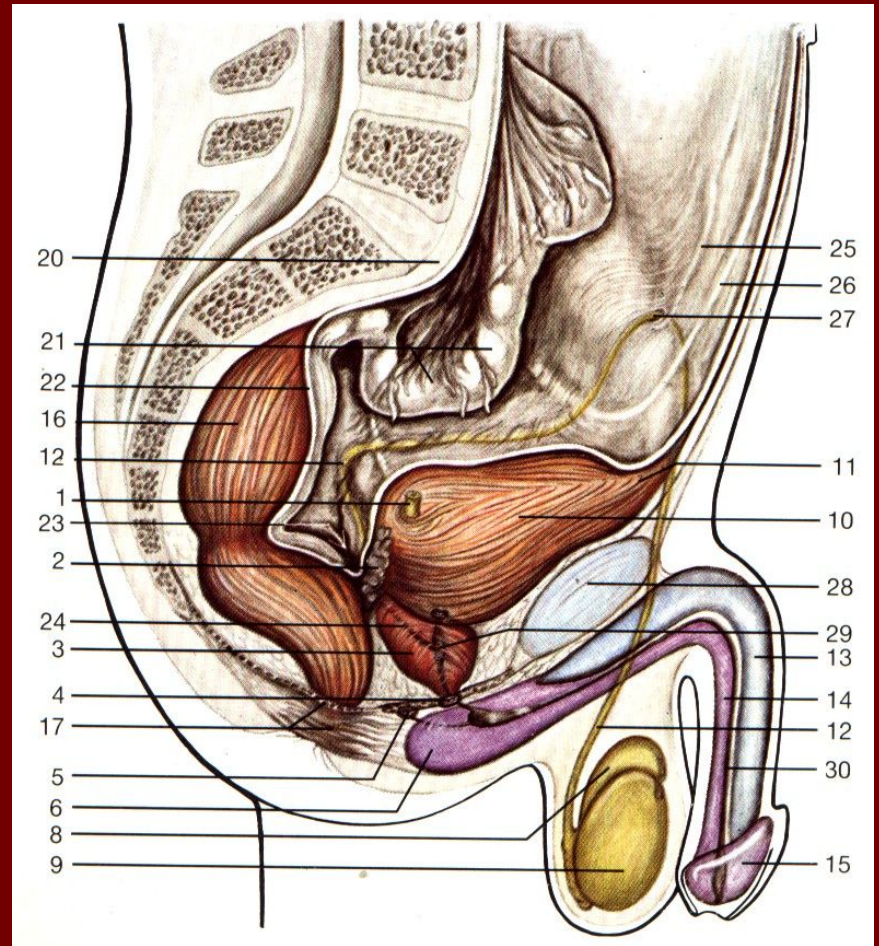
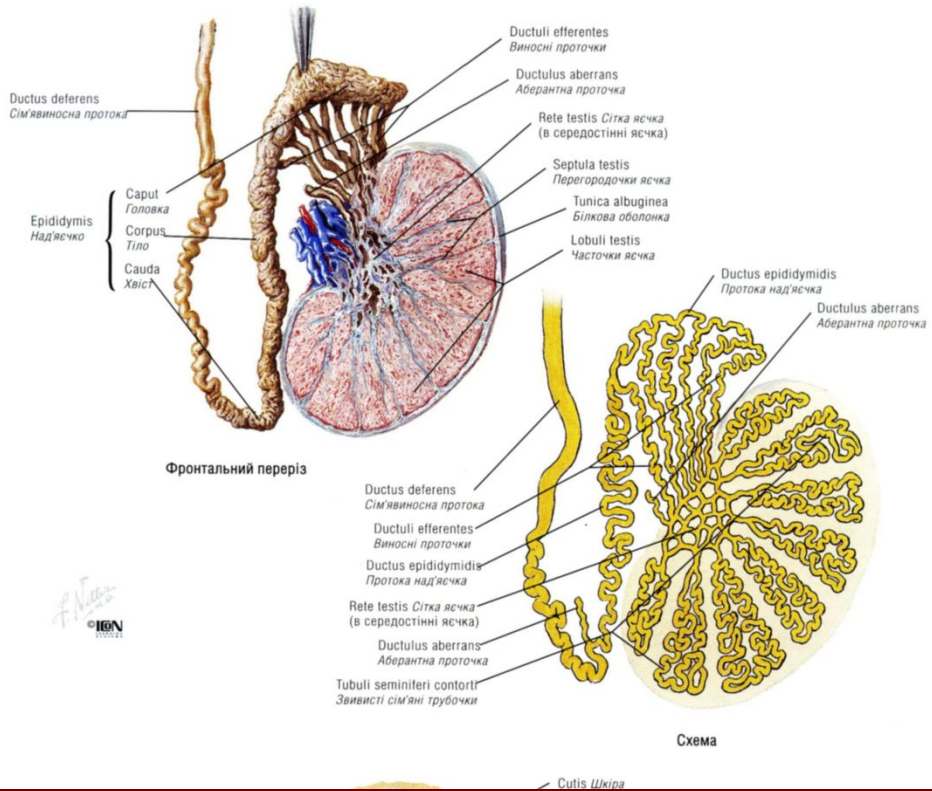
- head
- body
- tail



Ductus deferens

- **Four parts:**
 - **the scrotal**
 - **the funicular**
 - **the inguinal**
 - **the pelvic. In the terminal portion of the vas deference it becomes wide and spindle-shape, forming the ampulla of the vas deference**





The wall of the ductus deference is composed of three layers:

- **an outer adventitious coat**
- **a middle muscular coat**
- **an inner mucous coat**

The seminal vesicles

- It is a tubular gland
- The seminal vesicles contribute 60 percent of the volume of semen
- The junction of the duct of the seminal vesicles with ampulla of the ductus deferens marks the ejaculatory duct
- Opens into prostate part of the urethra

Vesica urinaria
Сечовий міхур

Ampulla ductus
deferentis
Ампула сім'явипорскувальної
протоки

Ductus ejaculatorius
Сім'явипорскувальна
протока (початок)

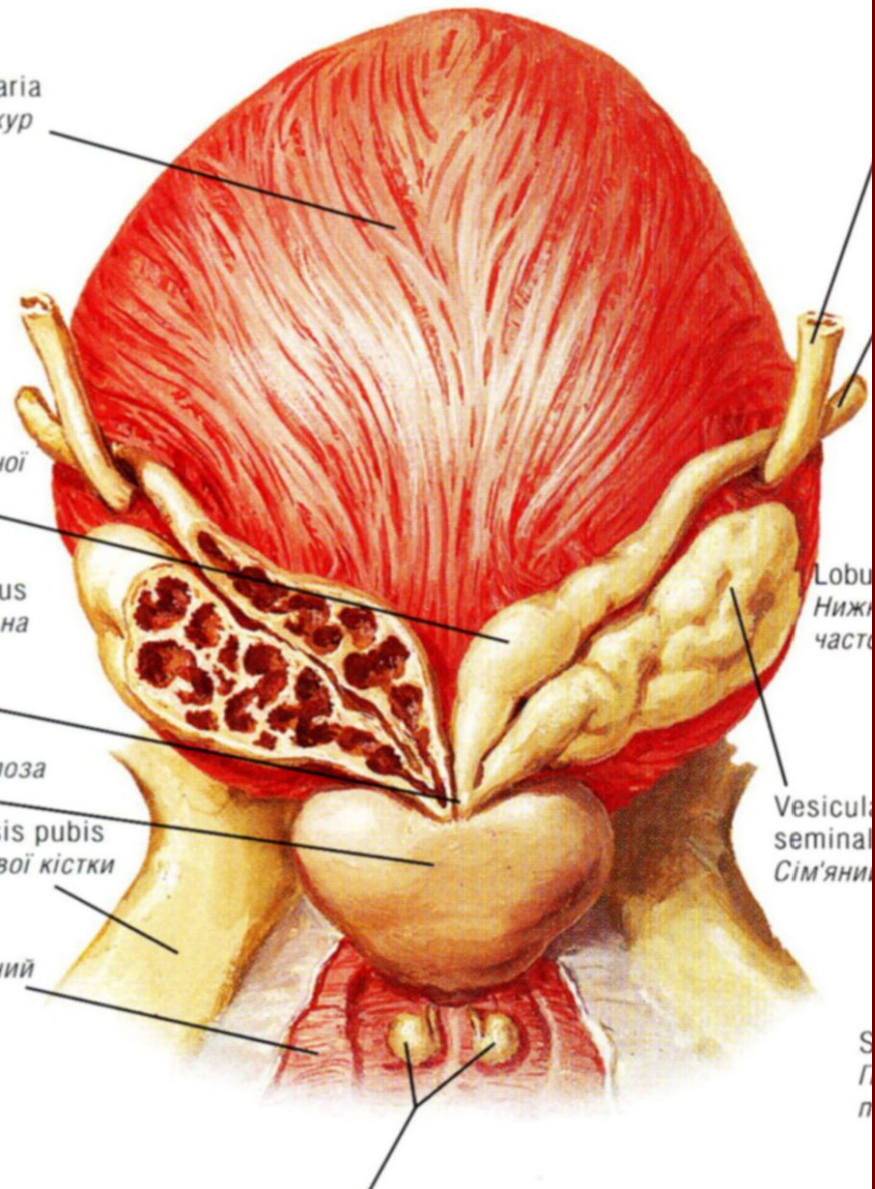
Prostata
Передміхурова залоза

Ramus inferior ossis pubis
Нижня гілка лобкової кістки

M. transversus
perinei profundus
Глибокий поперечний
м'яз промежини

Lobus
Нижня
частина

Vesicula
seminalis
Сім'яни



The prostate gland

- The prostate gland is partly muscular and partly glandular organ
- It secretes a component of semen

The prostate has:

- base and apex
- anterior, posterior and inferolateral surfaces
- left, right and middle lobes

Vesica urinaria
Сечовий міхур

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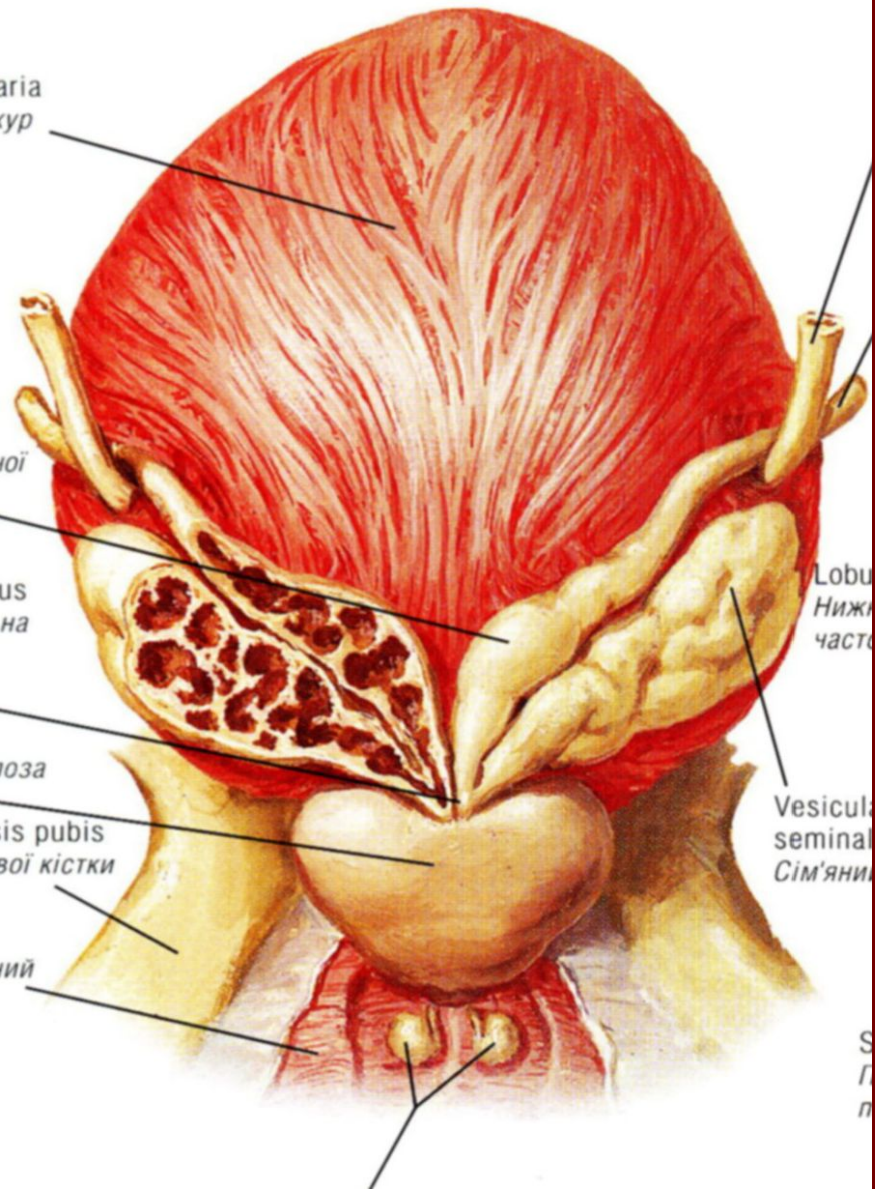
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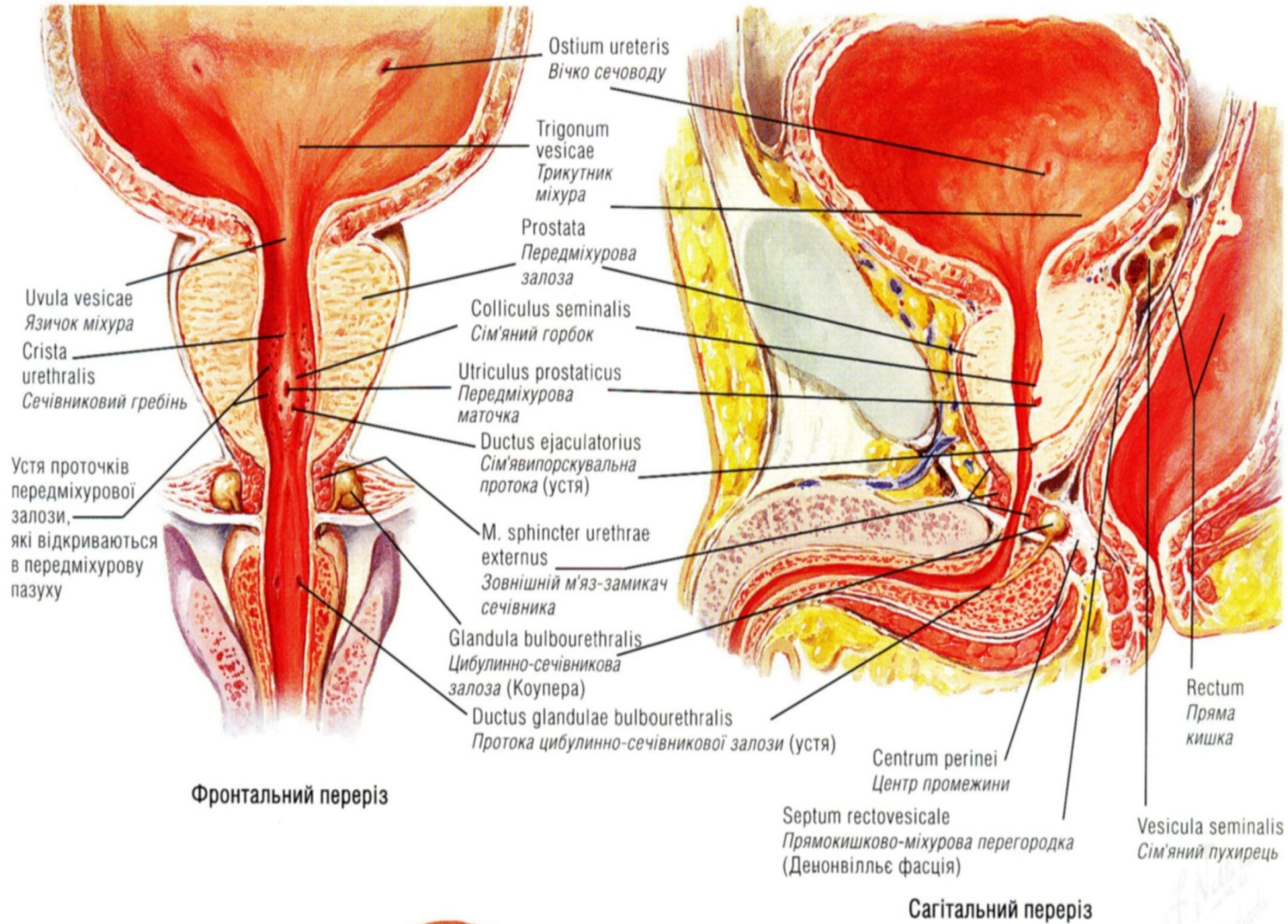
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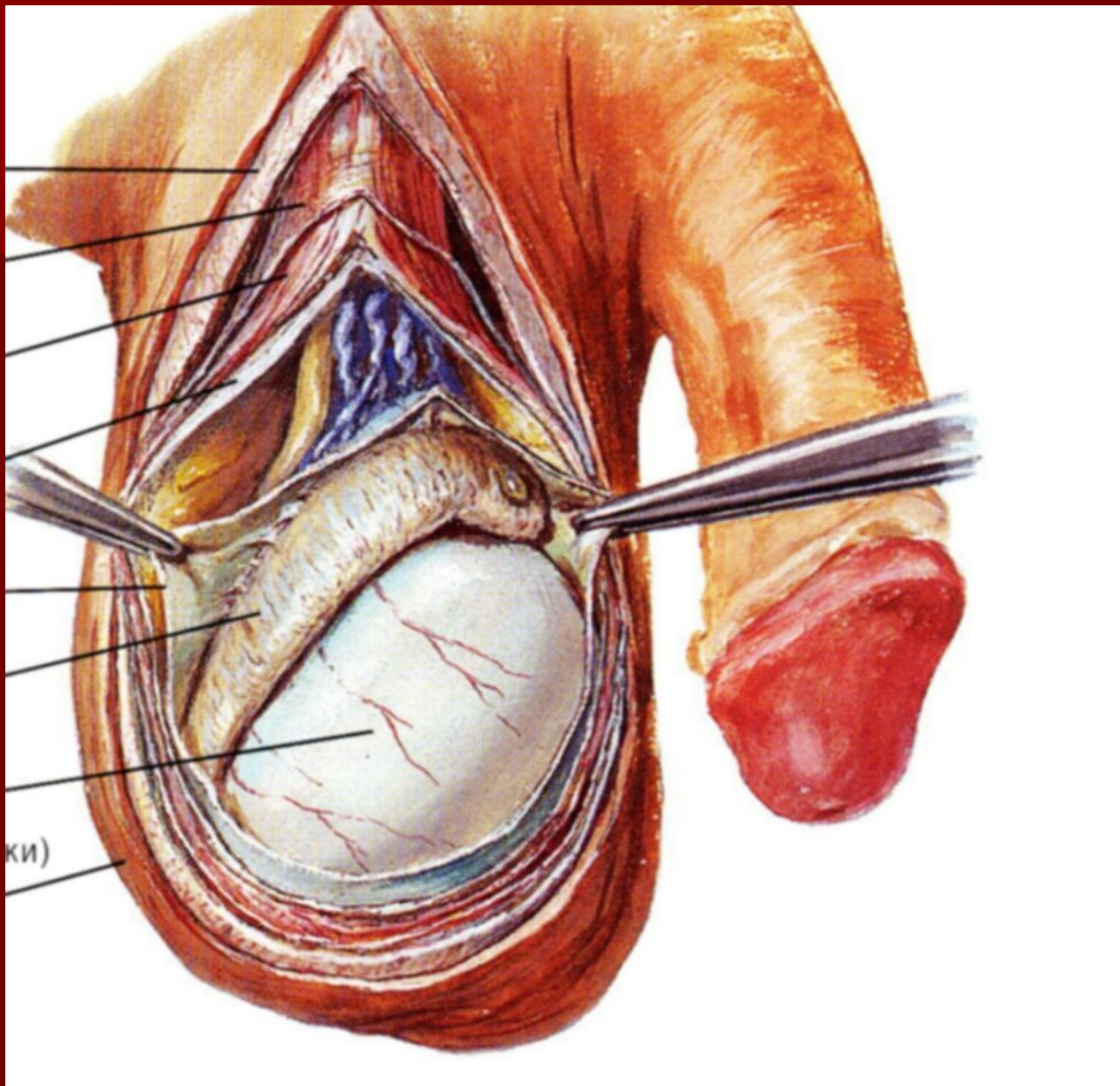
The bulbourethral glands or Cowper's glands

- **They are situated at the base of the penis, covered by the fascia of the urogenital diaphragm**
- **The excretory duct opens into the spongy portion of the urethra**
- **The secretion of the glands protects the urethral walls from irritation by the urine**



Scrotum

- **Skin** ← **skin**
- **Dartos tunic** ← **subcutaneous**
connective tissue
- **External spermatic fascia** ← **superficial fascia of**
the abdomen
- **Cremasteric fascia** ← **proper fascia of the**
external oblique **abdominal**
muscle
- **Cremaster muscle** ← **internal oblique**
abdominal and **transversal**
muscles
- **Internal spermatic fascia** ← **transverse fascia**
- **Vaginal tunic** ← **peritoneum**



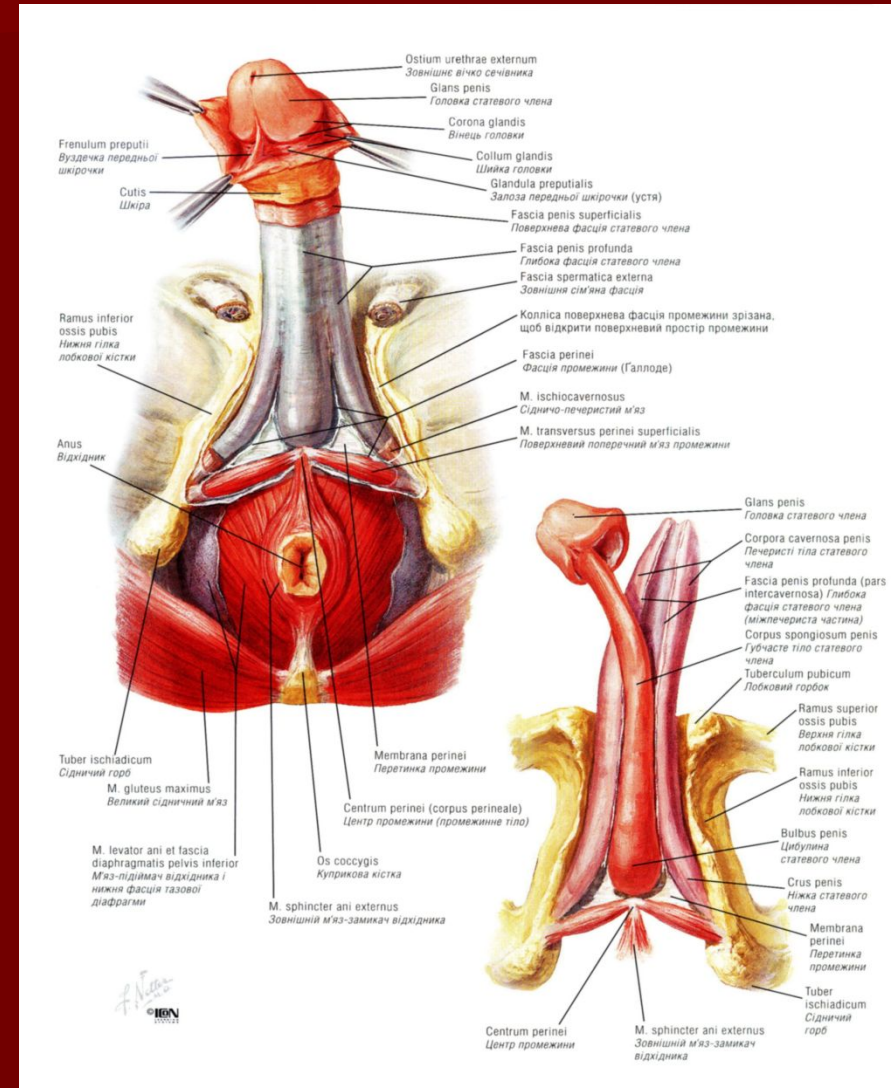
Spermatic cord

- the vas deferens;
- testicular artery;
- convoluted (venous) pampiniform plexus;
- the artery and veins of the vas deferens;
- the lymphatic vessels of the testis and the epididymis;
- the nerves;
- the vestige of the processus vaginalis

The penis consists of:

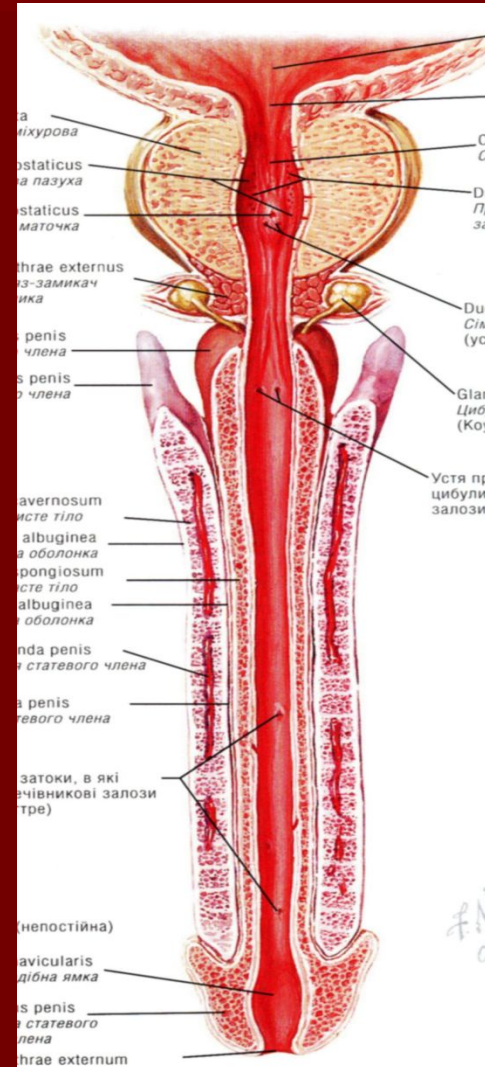
- root
- body
- glans penis

- two corpora cavernosa
- corpus spongiosum



There are three parts has the male urethra

- prostatic
- membranous
- spongy



Internal female organs

- ovaries
- uterine tubes
- uterus
- vagina

External female organs

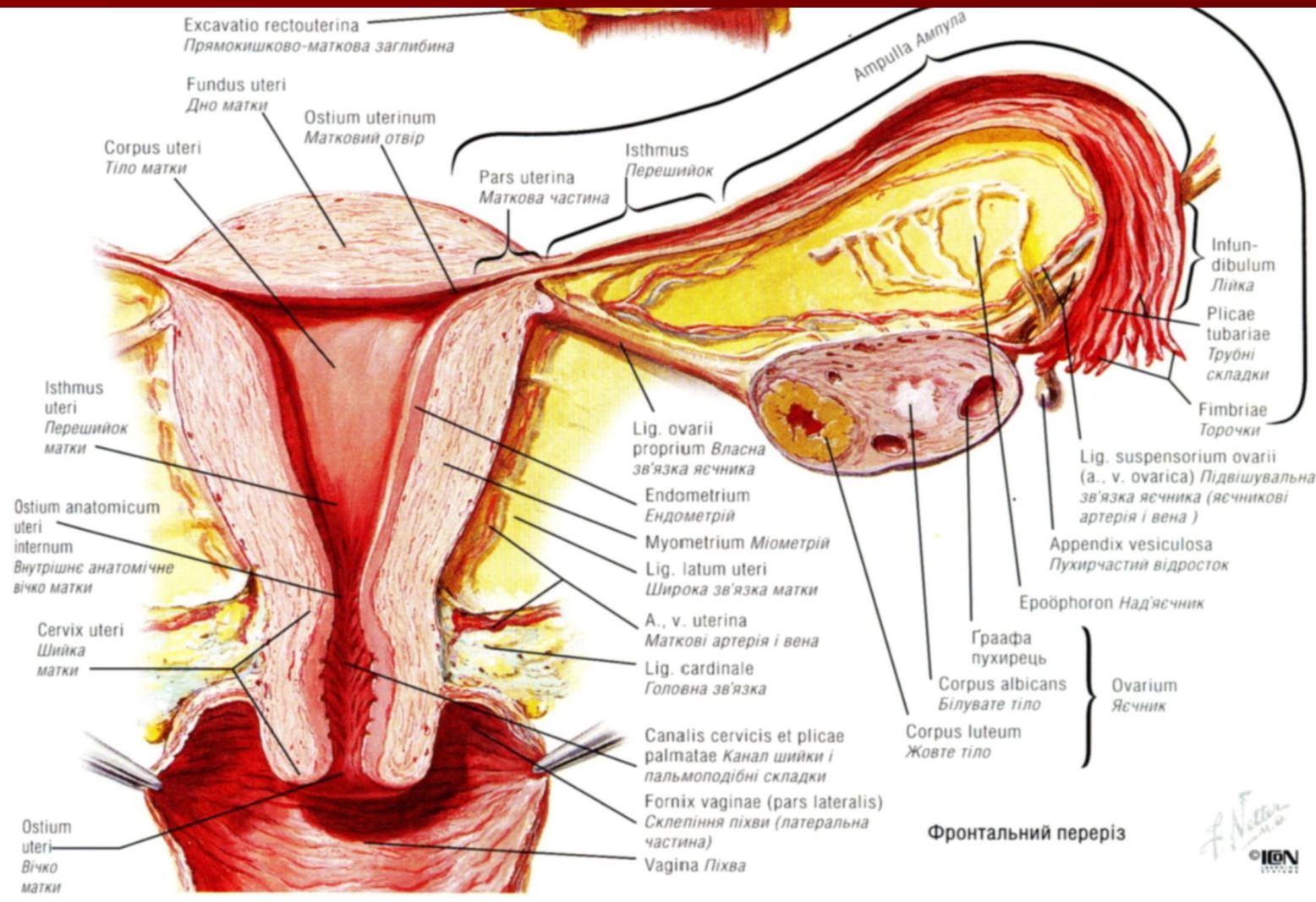
- **mons pubis**
- **clitoris - is a structure analogous to the corpora cavernosa of the penis**
- **labium majus limit the glottis (rima) pudendi**
- **labium minus pudenda - bound the vestibule of the vagina**
- **vestibule of the vagina**
- **greater vestibular gland**
- **bulb of vestibule - is a structure analogous to the corpus spongiosum of the penis**

The ovary

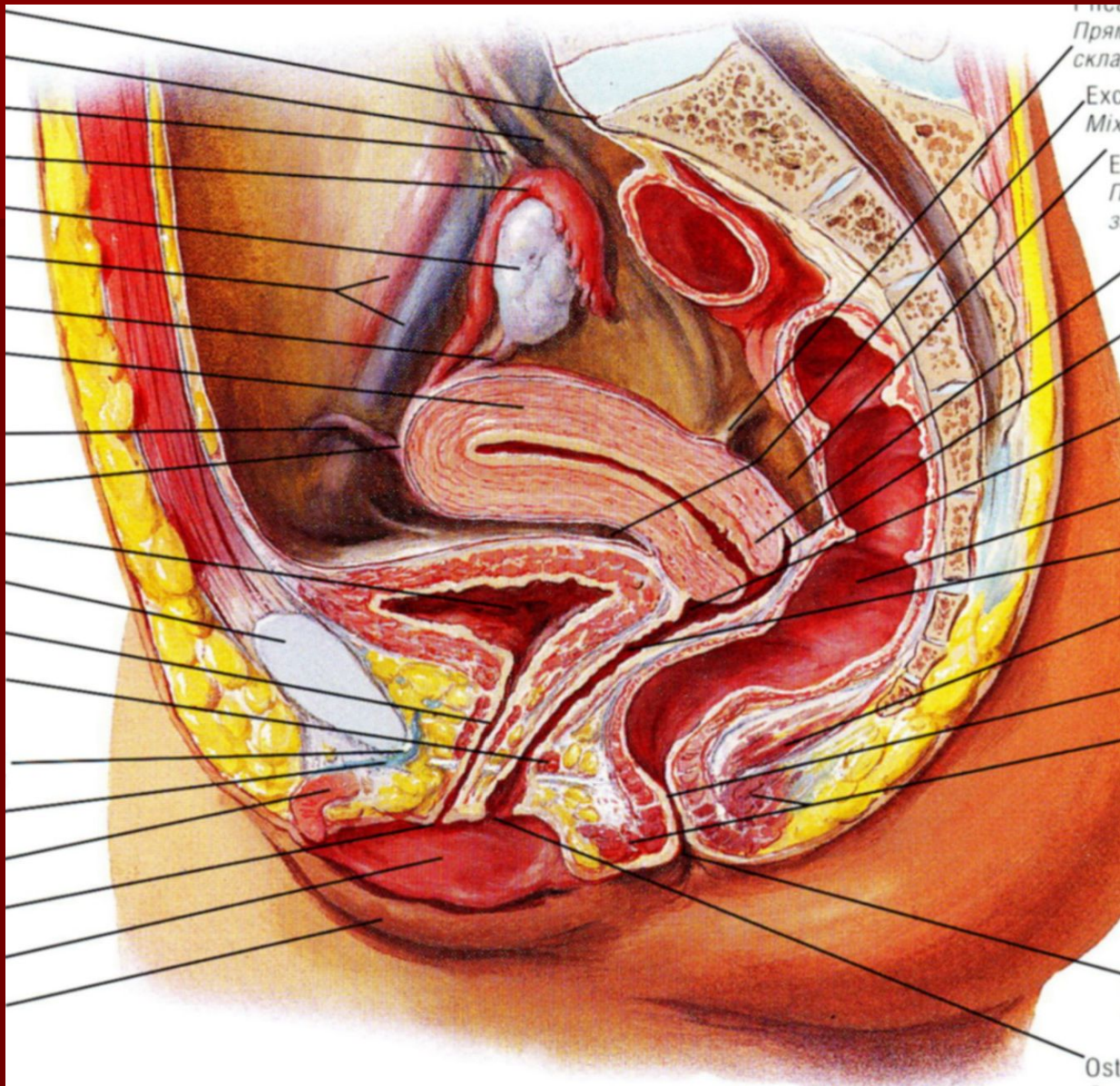
- **The exocrine function is to produce ovules**
- **The endocrine function is to produce female sexual hormones**

The ovary has:

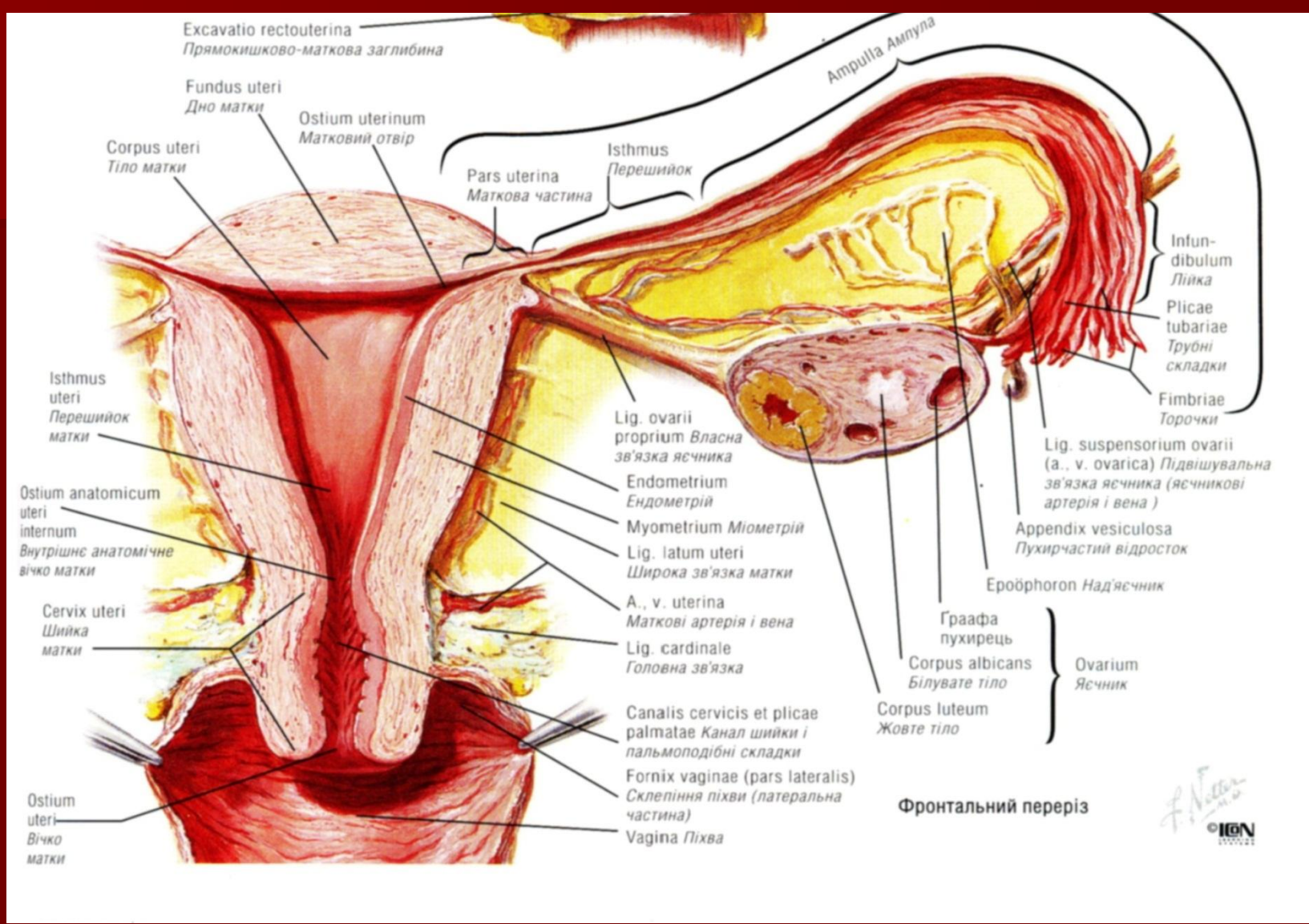
- **two surfaces: medial and lateral**
- **two extremities: tubal and uterine**
- **two borders: free posterior and anterior mesovarium**



Фронтальний переріз



- **The ovary has is lined from the outside by germinal (embryonic) epithelium under which is the connective tissue layer - tunica albuginea**
- **The substance of the ovary is divided into: superficial cortex
deeper medulla**
- **The position of each ovary is stabilized by the mesovarium and by supporting ligaments:**
 - **the ovarian ligament and**
 - **suspensory ligament**



Excavatio rectouterina
Прямокишково-маткова заглибина

Fundus uteri
Дно матки

Corpus uteri
Тіло матки

Ostium uterinum
Матковий отвір

Isthmus uteri
Перешийок матки

Ostium anatomicum uteri internum
Внутрішнє анатомічне вічко матки

Cervix uteri
Шийка матки

Ostium uteri
Вічко матки

Ampulla Ампула

Isthmus Перешийок

Pars uterina
Маткова частина

Infundibulum Лійка

Plicae tubariae
Трубні складки

Fimbriae Торочки

Lig. ovarii proprium
Власна зв'язка яєчника

Endometrium
Ендометрій

Myometrium
Міометрій

Lig. latum uteri
Широка зв'язка матки

A., v. uterina
Маткові артерія і вена

Lig. cardinale
Головна зв'язка

Canalis cervicis et plicae palmatae
Канал шийки і пальмоподібні складки

Fornix vaginae (pars lateralis)
Склепіння піхви (латеральна частина)

Vagina Піхва

Lig. suspensorium ovarii (a. v. ovarica)
Підвішувальна зв'язка яєчника (яєчникові артерія і вена)

Appendix vesiculosa
Пухирчастий відросток

Ероофорон Над'яєчник

Граафа пухирець

Corpus albicans
Білувате тіло

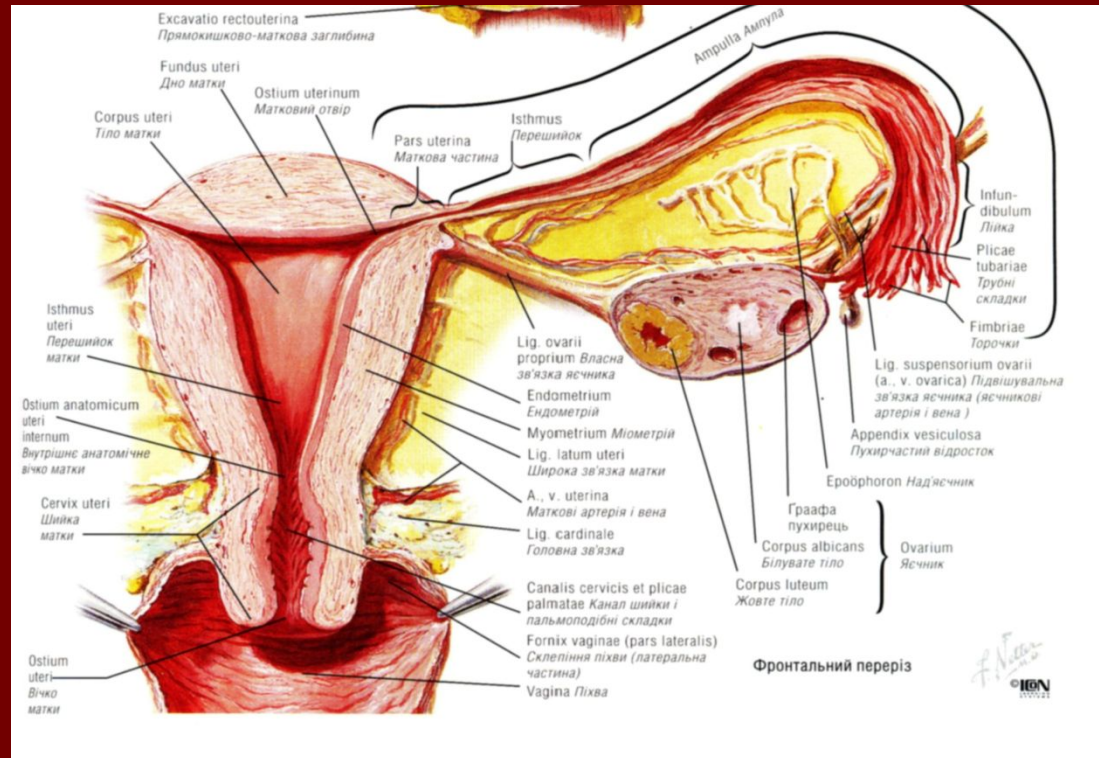
Corpus luteum
Жовте тіло

Ovarium
Яєчник

Фронтальний переріз

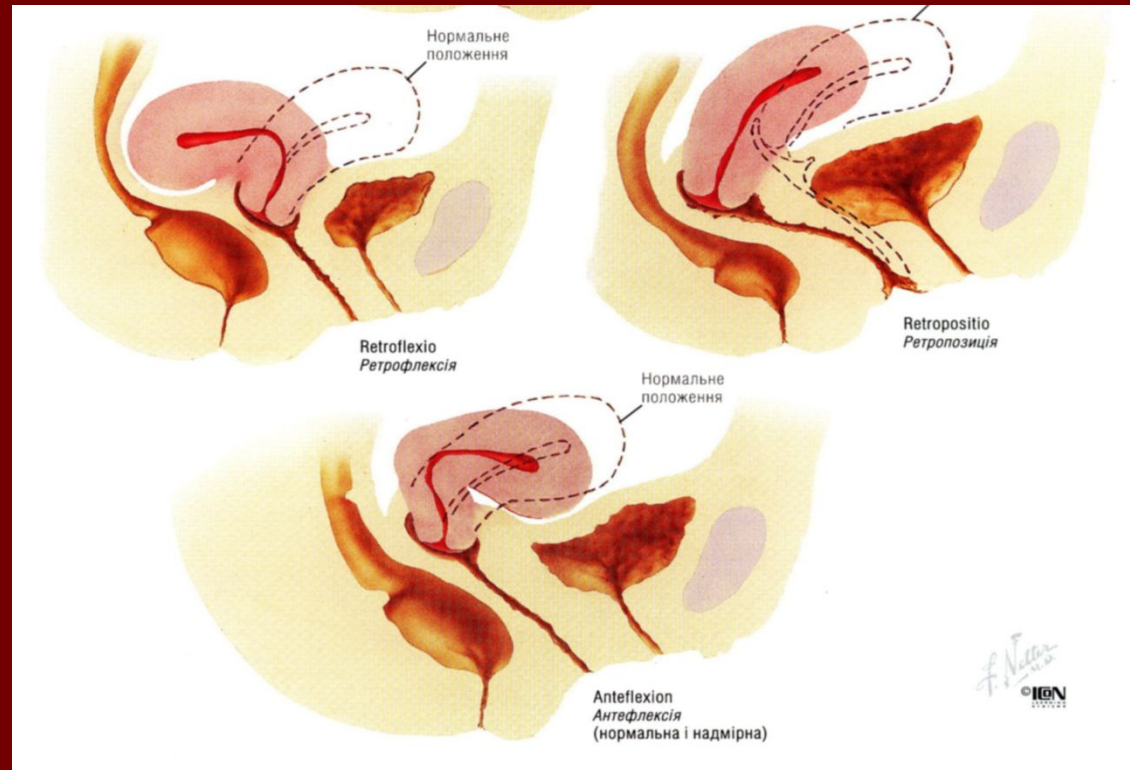
Appendages of the ovary

- epoophoron
- paroophoron



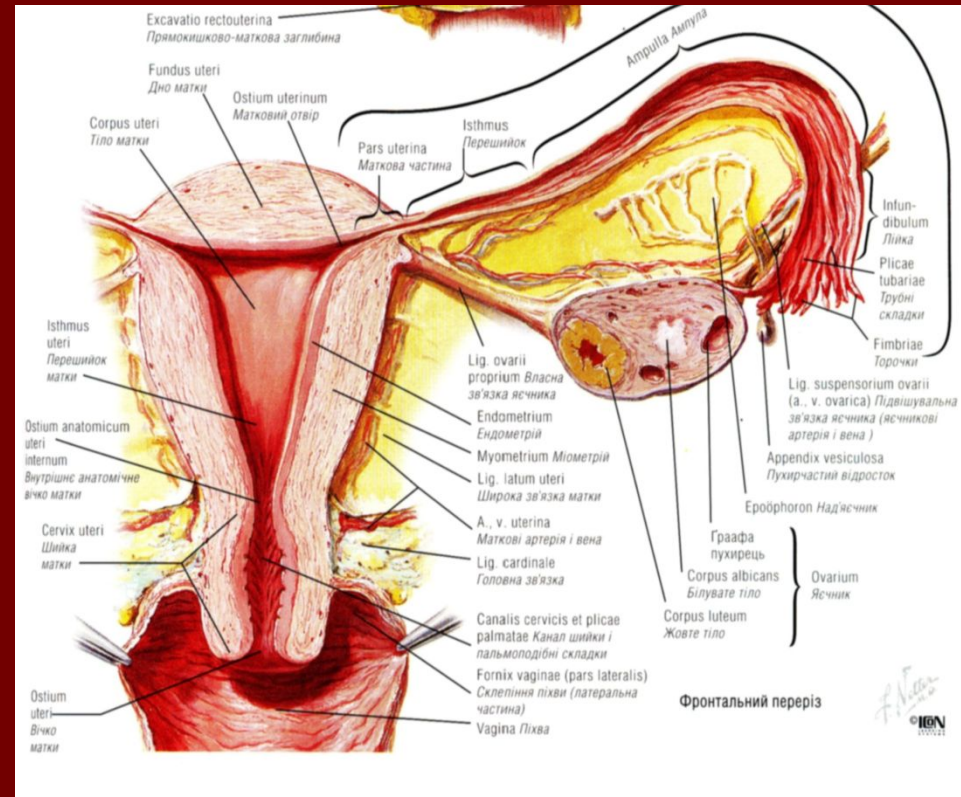
Position of the uterus

- anteversio
- anterflexio
- lateroposition
- retroversion
- retroflexio



The uterus

- fundus
- body
- isthmus
- neck: supravaginal vaginal parts
- uterine cavity
- cervical canal

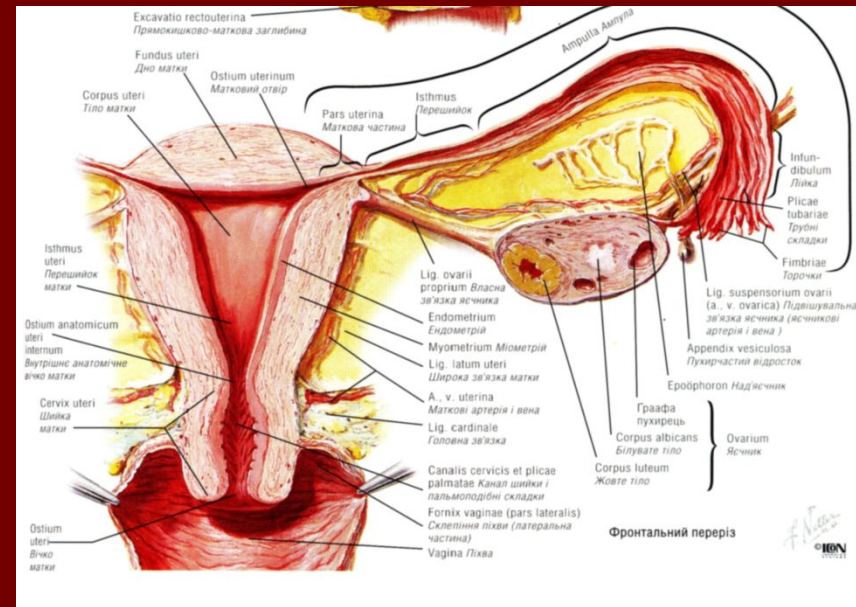


The wall of the uterus

- **serous coat - the perimetrium**
- **muscular coat – myometrium:
internal and external longitudinal
and middle circular layers**
- **mucosa - endometrium**

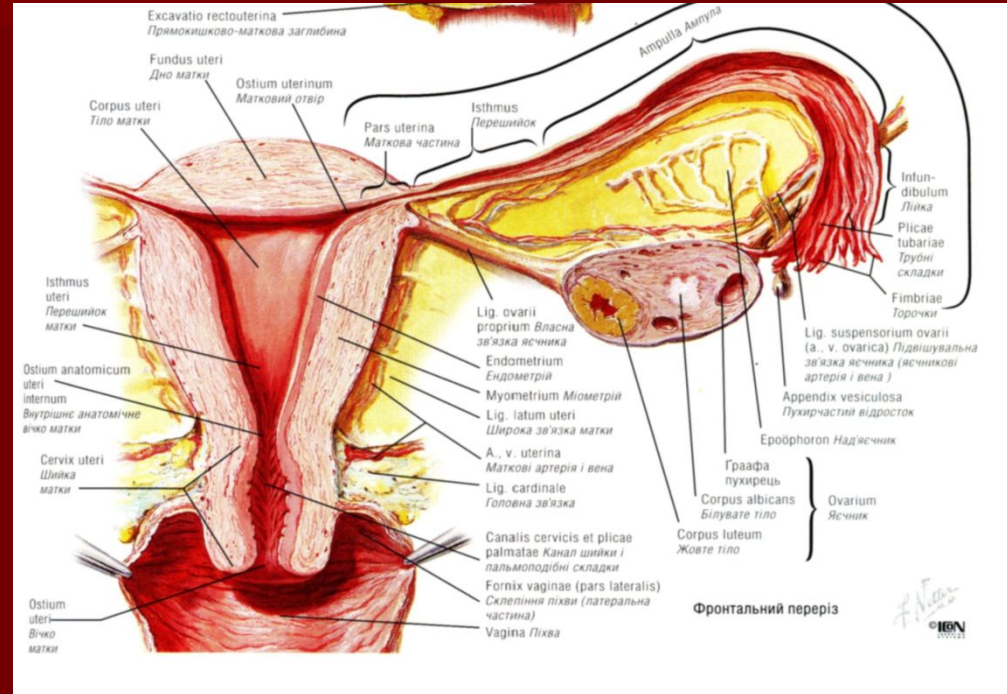
The ligaments of the uterus

- the broad ligament consists of the mesovarium mesosalpinx mesometrium
- the round ligament



Uterine tube or Fallopian tube

- ostium:
 - abdominal
 - uterine
- parts:
 - uterine part
 - isthmus
 - ampulla
 - infundibulum, which ends with the fimbria



The wall of the uterine tube

- the serous coat
- the muscular coat: internal circular and external longitudinal
- the mucosa

The wall of the vagina

- outer - connective tissue
- middle - muscular coat
- inner - mucosa. The mucosa forms numerous transverse rugae, which form longitudinal ridge or vaginal columns

