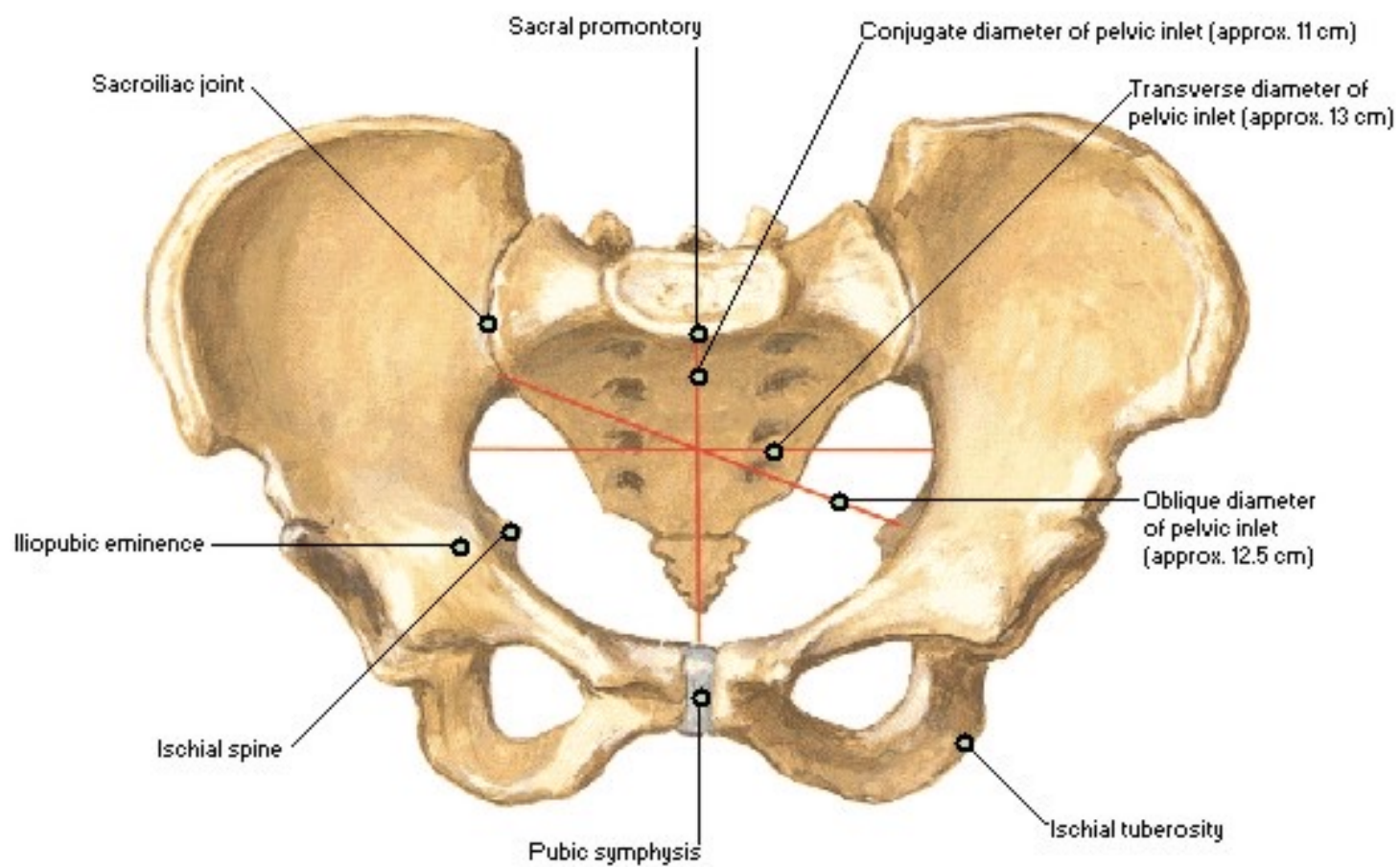


Pengantar Praktikum Reproduksi

Female Pelvis

Measurements - Anterior View

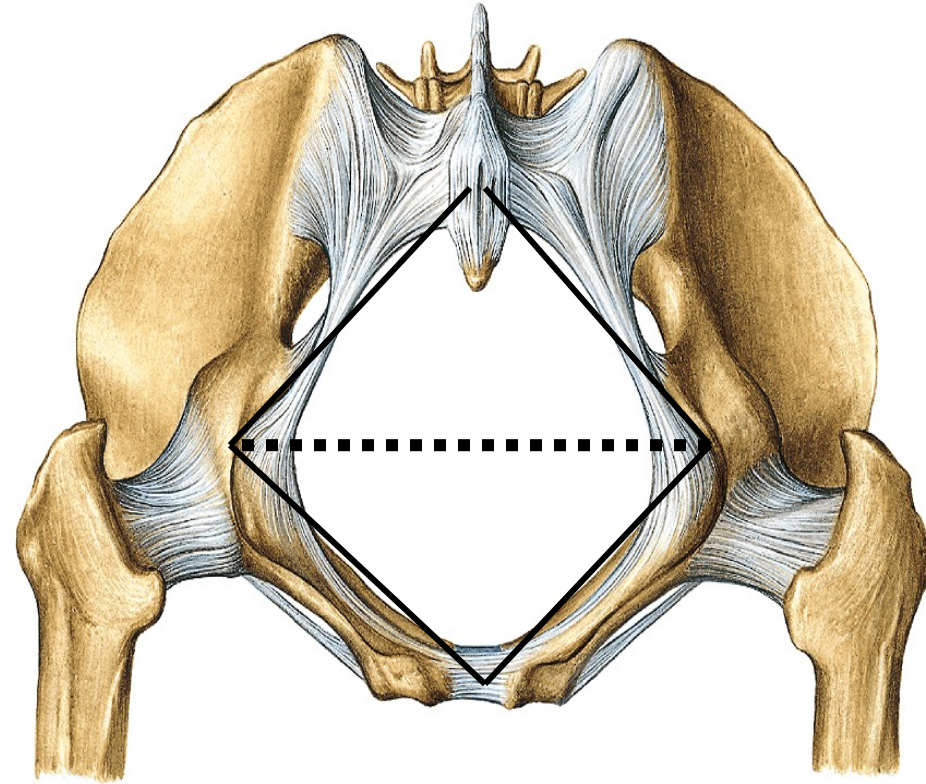


Pelvis verum

- Cavum pelvis
- Pintu masuk: apertura pelvis superior (Pintu Atas Panggul=PAP)
- Pintu keluar: apertura pelvis inferior (Pintu Bawah Panggul=PBP)

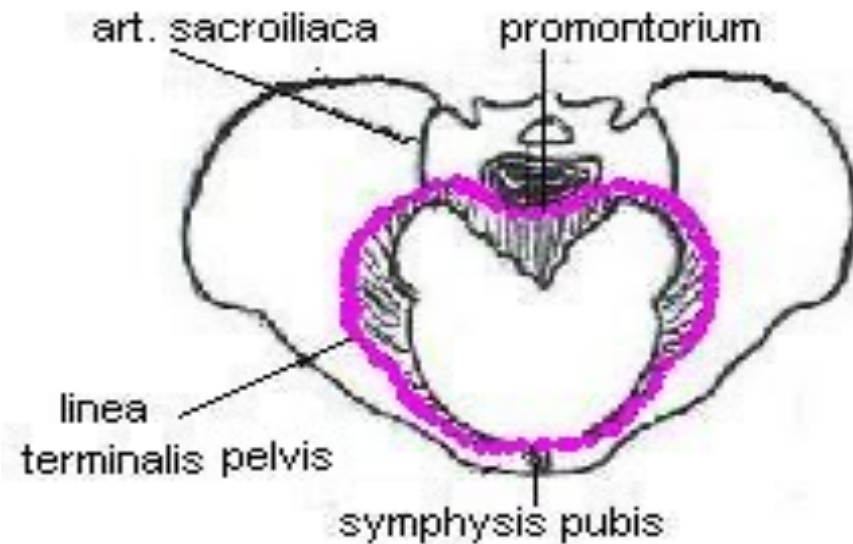
→ 2Δ:

- Ventral: trigonum urogenitale
→ ramus inf. Os.pubis, ramus inf. Os.ischii, pc: symphysis os.pubis
- Dorsal: trigonum anale
→ 2 lig. Sacrotuberosa, pc: os.coccygis



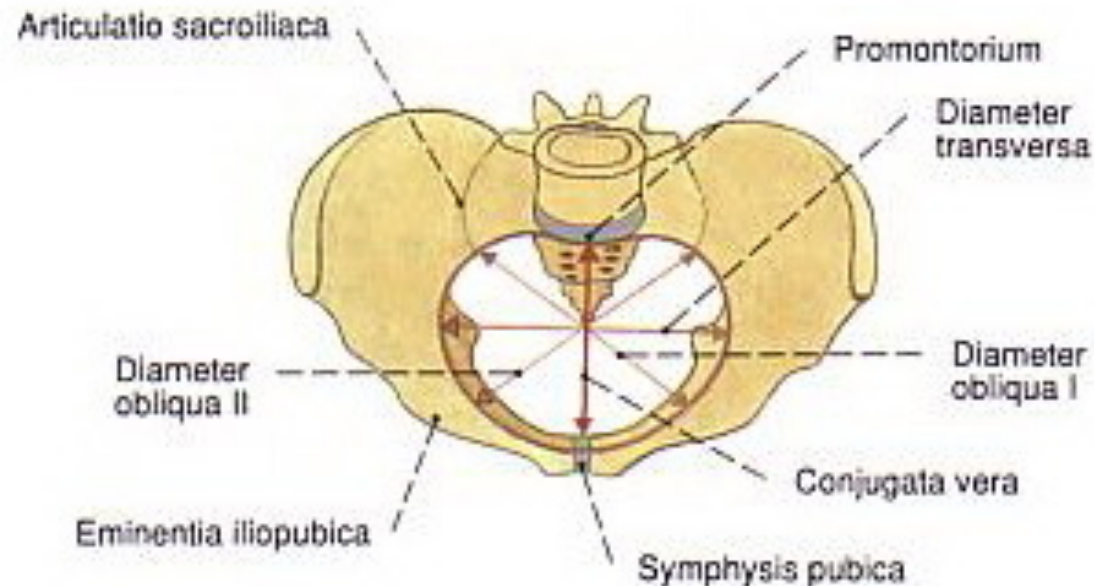
PAP

- Dorsal:
promontorium sacralis
- Lateral:
linea terminalis pelvis
 - Linea arcuata os.ilii (linea iliopectinea)
 - Pars lateral os sacrum
 - Pecten os pubis
 - Crista/tuberculum pubica
- Anterior:
symphysis os pubis



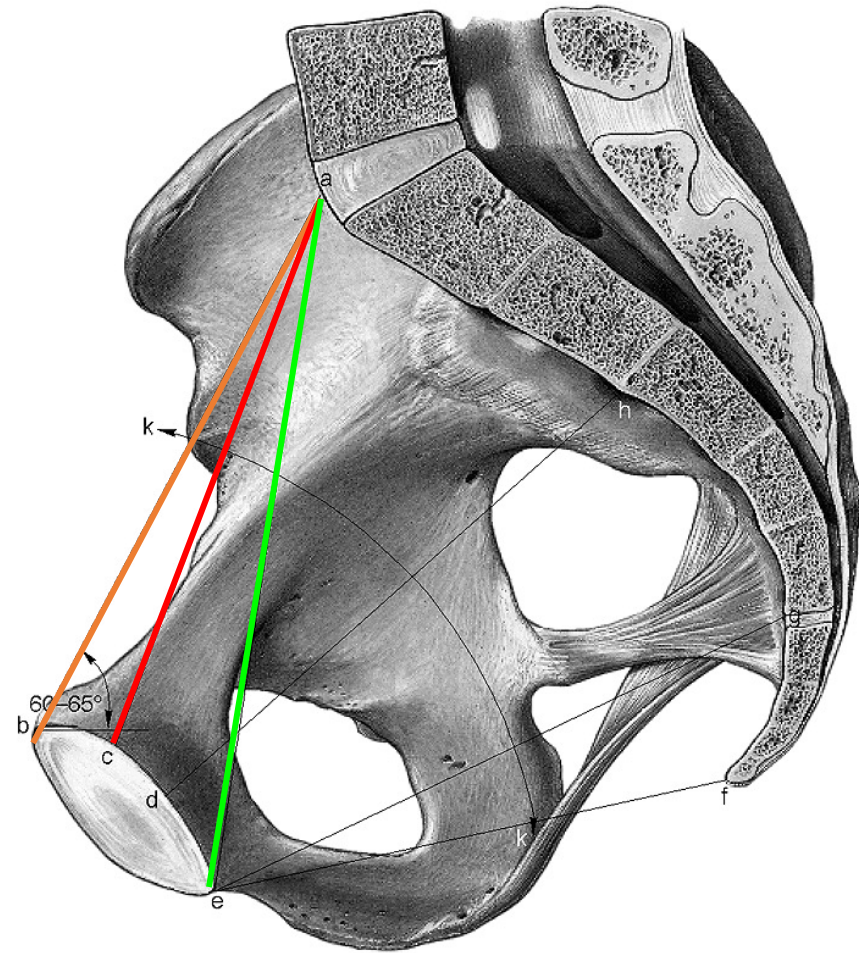
Apertura Pelvis Superior/PAP

- Ø anteroposterior (conjugata vera/interna):
 - Ttk tgh promontorium sacralis – tepi atas symphysis pubis
- Ø obliqua:
 - eminentia iliopubica – art.sacroiliaca contralateral
- Ø transversa:
 - jarak terjauh garis melintang PAP
- Distansia interspinarum: jarak antara kedua spina ishiadica



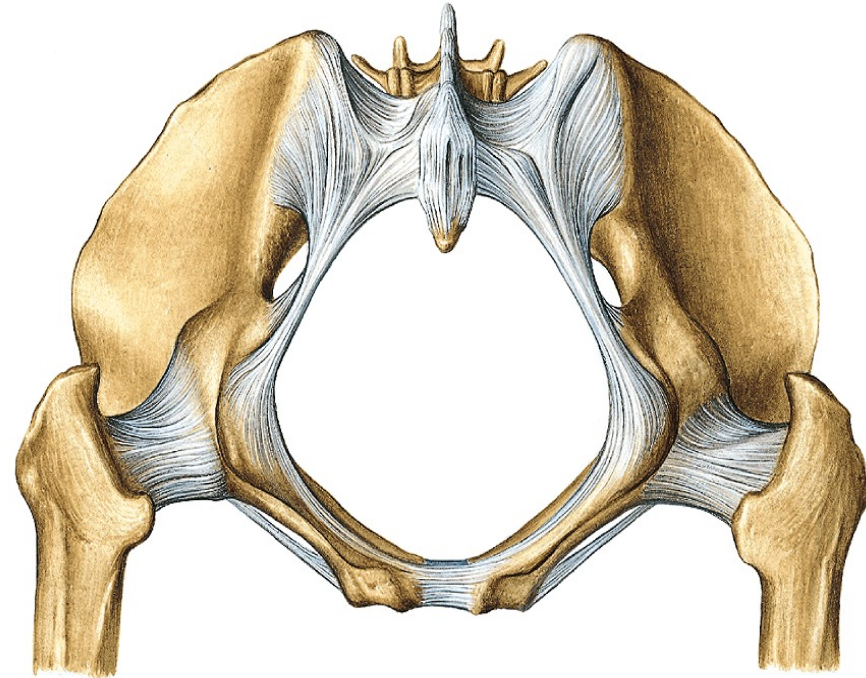
Ukuran-ukuran panggul

- **Conjugata vera**: tepi atas symphysis pubis – promontorium sacralis
- **Conjugata diagonalis**: tepi bawah symphysis pubis – promontorium sacralis
- **Conjugata obstetrica**: bagian dalam symphysis pubis – promontorium sacralis



Ukuran-ukuran panggul: PBP

- Ø antero-posterior:
 - ujung os.caccygis – titik tengah tepi bawah symphysis pubis
- Ø transversa (bituberal):
 - antara ke2 tuber ischiadica
- Ø obliqua:
 - titik tengah lig.sacrotuberosum – batas os.ischii & os.pubis sisi lawan

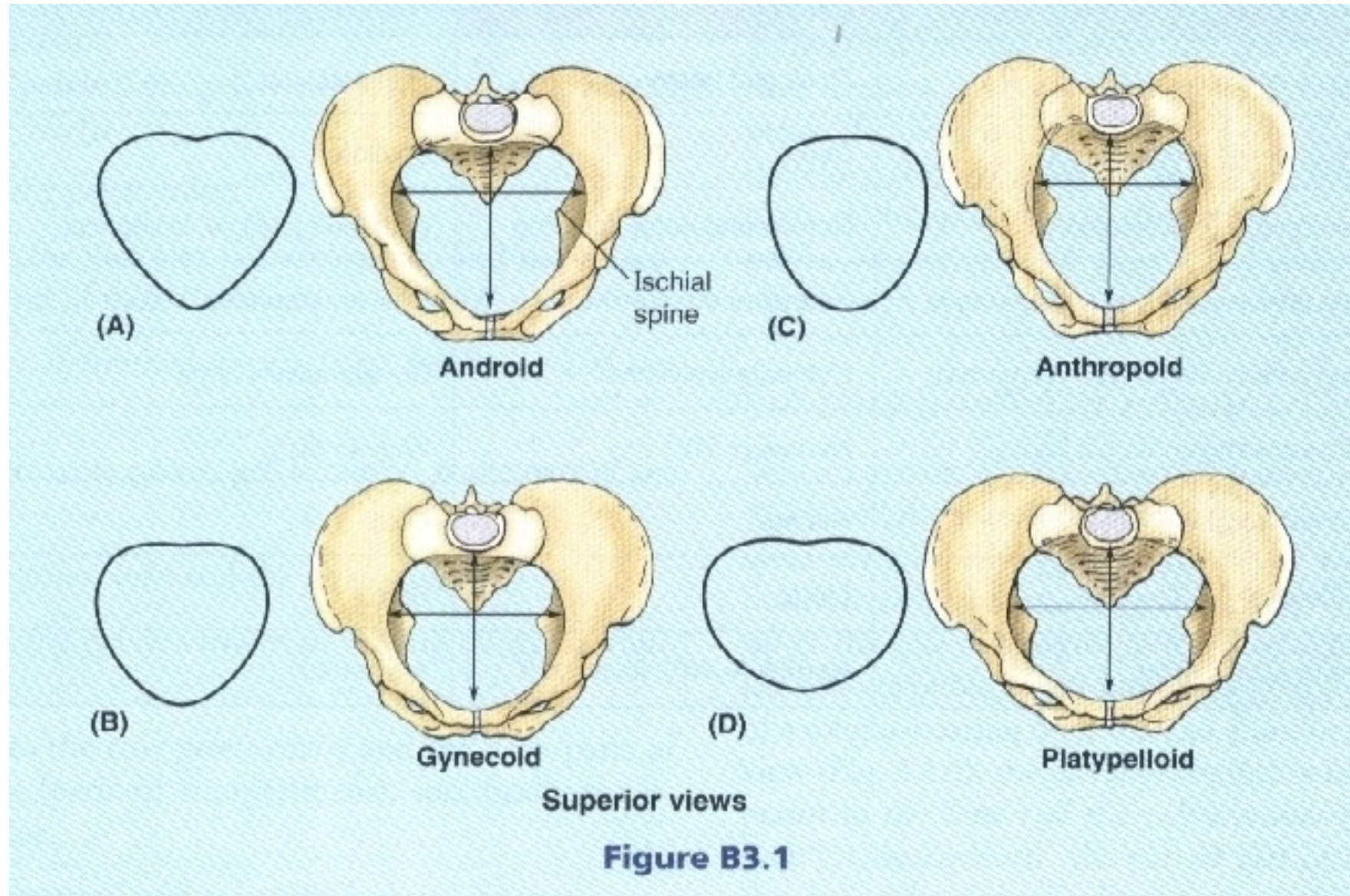


Panggul ♂ / ♀

	♂	♀
Pelvis verum	Segmen pendek dr kerucut panjang	Segmen panjang dr kerucut pendek
Angulus subpubic	Sempit (<70°)	Lebar (>80°)
Dinding pelvis spurium	Curam, SIAS ke medial	Dangkal, SIAS ke ventral
Ukuran2 Ø	kecil	besar
PAP	Btk jantung	oval
Apertura pelvis inferior	Kecil & lonjong	Besar, bundar

Pengelompokan bentuk panggul

(Caldwell & Molog)



Otot-otot Pelvis

- Otot tungkai
 - M. piriformis
 - M.obturator internusmenutupi ddg dorsal dan lateral panggul
- Diafragma pelvis
 - M.levator ani
 - M.coccygeus

Diafragma pelvis

- Pars muscularis:
 - M.levator ani
 - M.coccygeus
 - Fascia diafragmatis pelvis sup. & inf.
- Pars membranosa:
 - Letak di caudal pars muscularis
 - Menutupi trigonum urogenitale

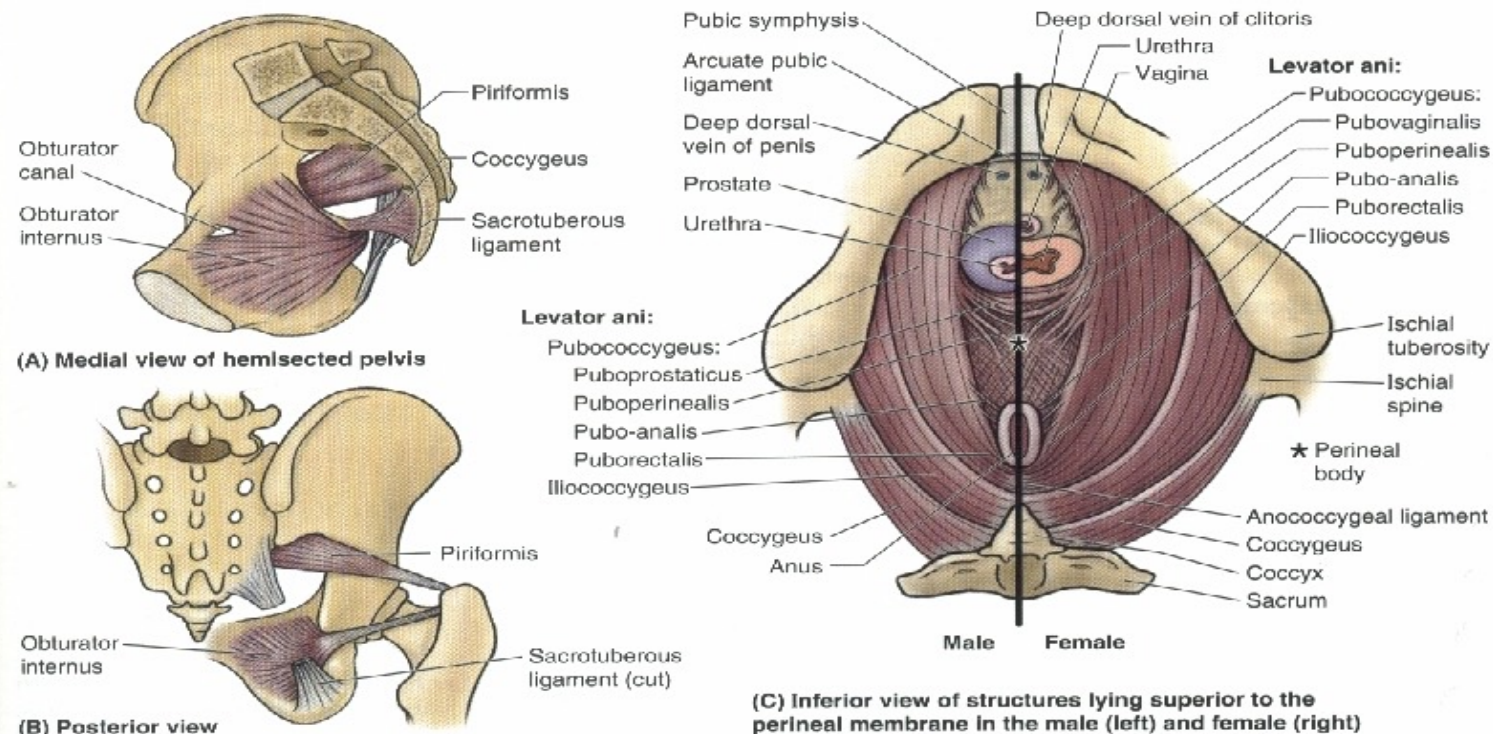
Pars muscularis

- M.levator ani:
 - Serabut2 ant. : m.levator prostate/
m.spinchter vaginae
 - Serabut2 intermedia: m.puborectalis,
m.pubococcygeus*
 - Serabut2 posterior: m.iliococcygeus*
- M. coccygeus

Pars membranosa

- Lapisan muskulofibrosa kaudal m.levator ani dlm Δ urogenitale
- 2 lbr fascia:
 - f.diaphragmatis urogenitalis superior
 - f.diaphragmatis urogenitalis inferior
- Diantara ke2 lbr fascia (*kantong perinealis profundus*):
 - m.transversus perinei profundus
 - m.sphincter urethrae
- Ventral permukaan luar:
 - m.transversus perinei superficialis

Table 3.2. Muscles of the Pelvic Walls and Floor



Boundary	Muscle	Proximal Attachment	Distal Attachment	Innervation	Main Action
Lateral wall	Obturator internus	Pelvic surfaces of ilium and ischium; obturator membrane	Greater trochanter of femur	Nerve to obturator internus (L5, S1, S2)	Rotates thigh laterally; assists in holding head of femur in acetabulum
Posterolateral wall	Piriformis	Pelvic surface of S2–S4 segments; superior margin of greater sciatic notch and sacrotuberous ligament	Greater trochanter of femur	Anterior rami of S1 and S2	Rotates thigh laterally; abducts thigh; assists in holding head of femur in acetabulum
Floor	Coccygeus (ischio-coccygeus)	Ischial spine	Inferior end of sacrum	Branches of S4 and S5 spinal nerves	Forms small part of pelvic diaphragm that supports pelvic viscera; flexes coccyx
	Levator ani (pubococcygeus and iliococcygeus)	Body of pubis; tendinous arch of obturator fascia; ischial spine	Perineal body; coccyx; anococcygeal ligament; walls of prostate or vagina, rectum, and anal canal	Nerve to levator ani (branches of S4), inferior anal (rectal) nerve, and coccygeal plexus	Helps support pelvic viscera and resists increases in intra-abdominal pressure

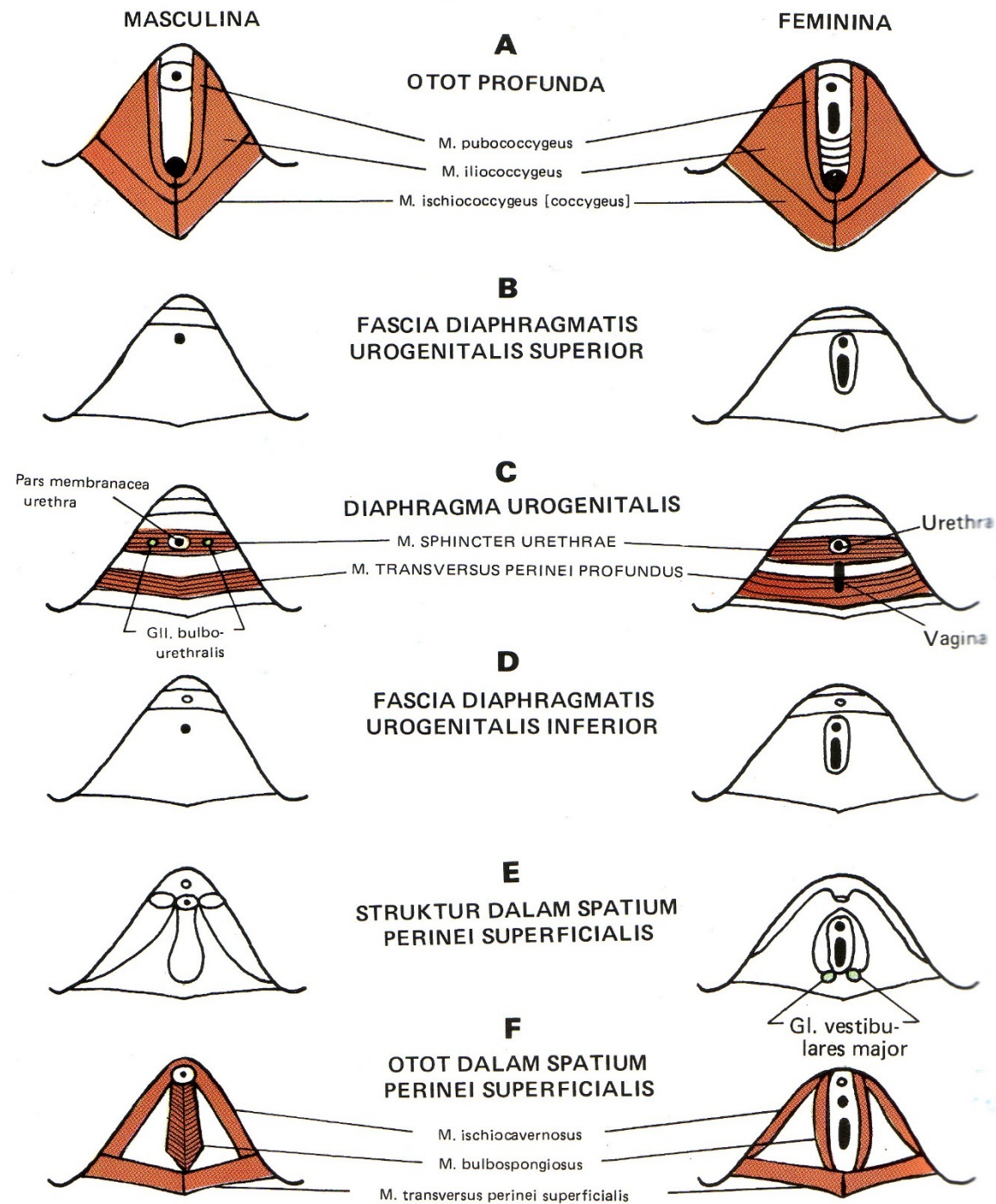
Persarafan & f/ m.levator ani

- Persarafan:
 - N.sacralis IV, N.rectalis inferior, Cbg perinealis N.pudendus
- Fx m.levator ani:
 - Konstriksi rectum, vagina
 - Fiksasi badan perineal
 - Bersama m.coccygeus :
 - Tahan & fiksasi alat2 rongga panggul
 - Memelihara dan mengatur tekanan intra abd

Persarafan & f/ m.coccygeus

- Persarafan
 - N.sacralis IV dan V
- Fx m.coccygeus:
 - Menarik ke depan dan menyangga os coccygis setelah defekasi/bersalin
 - Bersama m.levator ani dan m.piriformis, menekan bag.post rongga panggul dan PBP (jg jalan lahir)

Lapisan penutup pintu bawah panggul



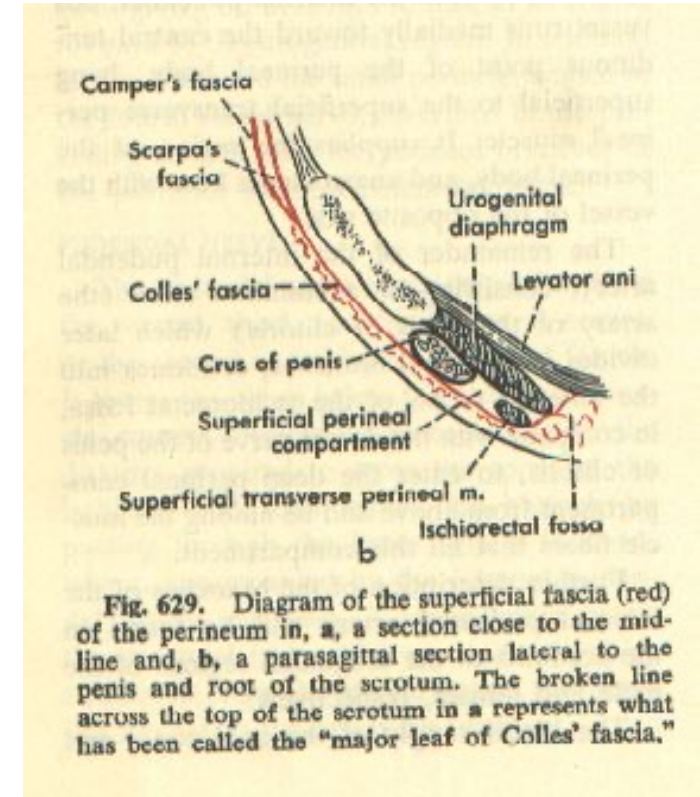
PERINEUM

- Menutupi permk.inferior diafragma pelvis
- Batas2 perineum = batas2 PBP
- 2 bagian:
 - Regio/trigonum anale
 - berisi muara canalis analis
 - Tersusun dari:
 - Fascia perinealis supf
 - Regio/trigonum urogenetale
 - berisi bag.extena alat ug
 - Tersusun 2 lapis:
 - Diafragma ug*
 - Fascia perinealis supf

Fascia perinealis

Lanjutan fascia abdominis, 2 lapisan:

- Fascia perinealis superficialis:
 - jar lemak (lanj fascia camper)
 - mbtk tunica dartos pd scrotum
 - ♀, mbtk lapisan jar lemak labium mayora
- Fascia perinealis profunda (fascia collesi):
 - Lanj fascia scarpae
 - Ke lat: melekat pd ramus inf os pubis & ramus inf os ischii
 - Ke ventral: lanj ke radix penis
 - Ke distal & medial: ikut mbtk tunica dartos & septum scroti
 - Ke dorsal: terletak blk m.transversus perinei superficialis → bersatu dg Ø urogenitale

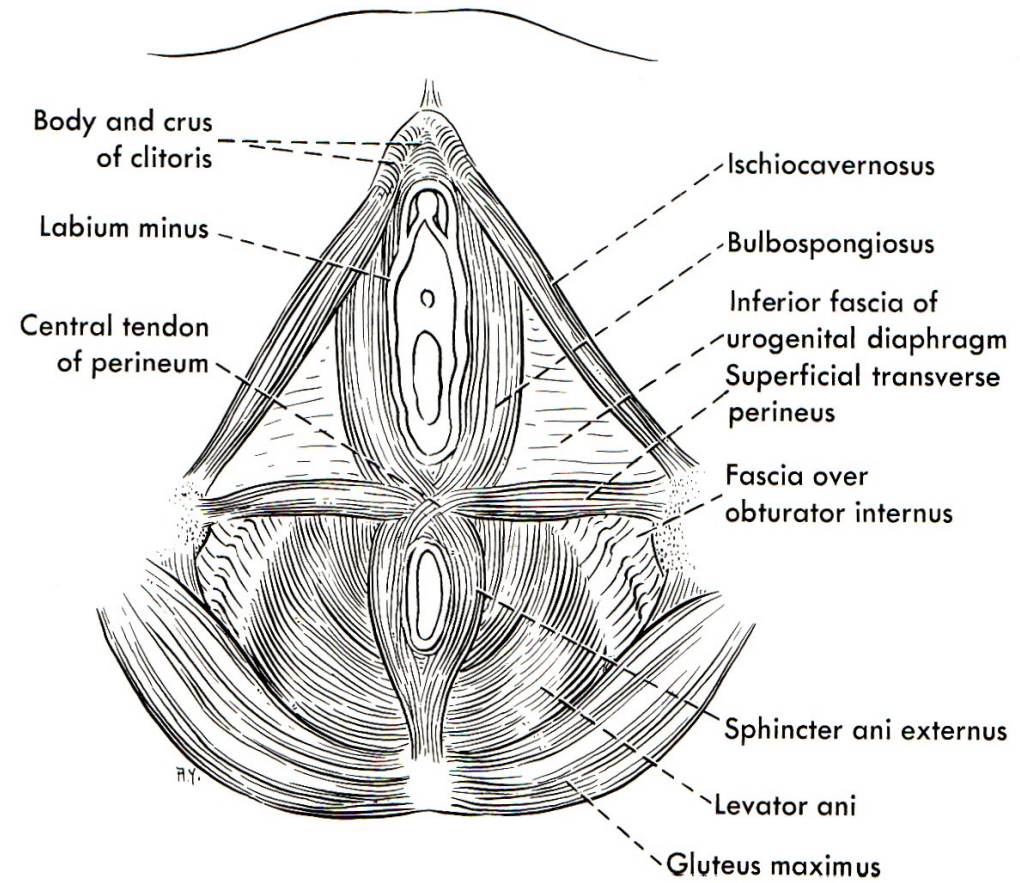
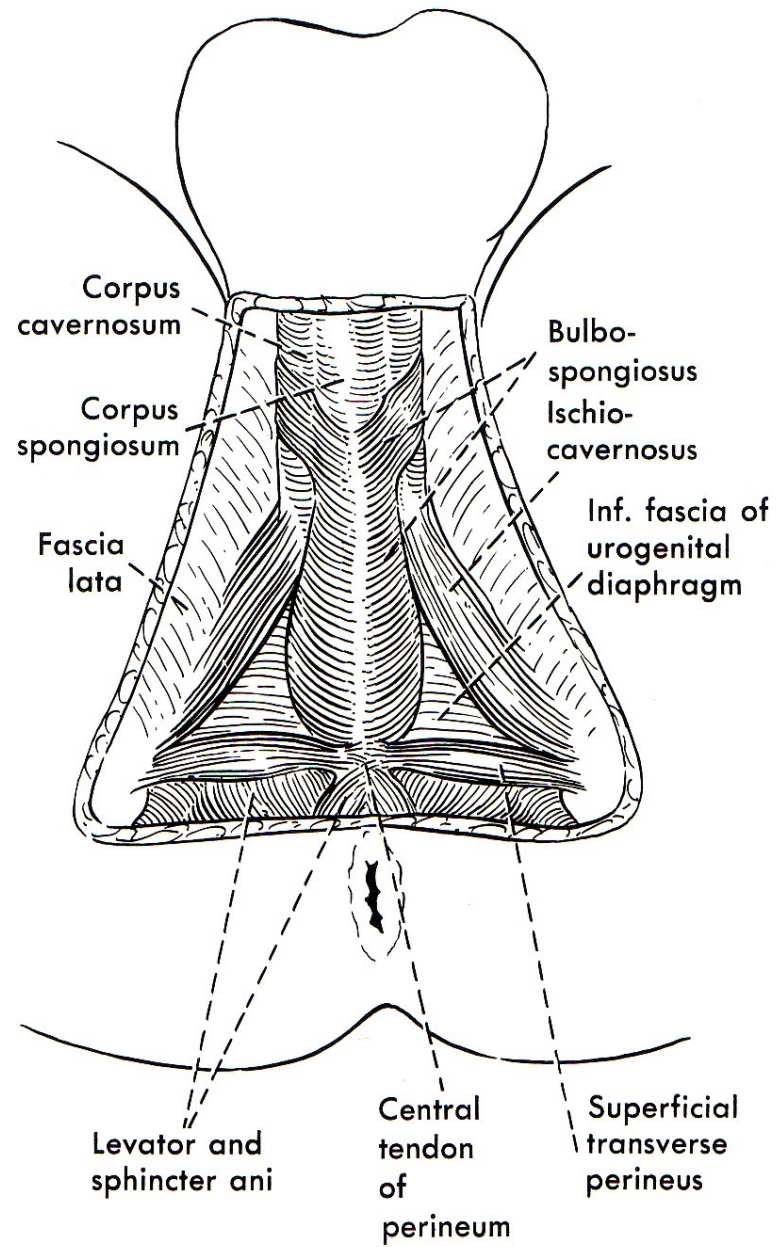


Spatium interfasciale

Spatium interfasciale (antara fascia Ø urogenitalis inf – fascia collesi)

→ *kantong perinealis superficialis*, tdpt:

- Crura corporis cavernosi penis dg m.ischiocavernosi
- Corpus spongiosum urethrae (bulbus penis) dg m.bulbospongiosus
- M.transfersus perinei superficialis
- a,v,n. perineale

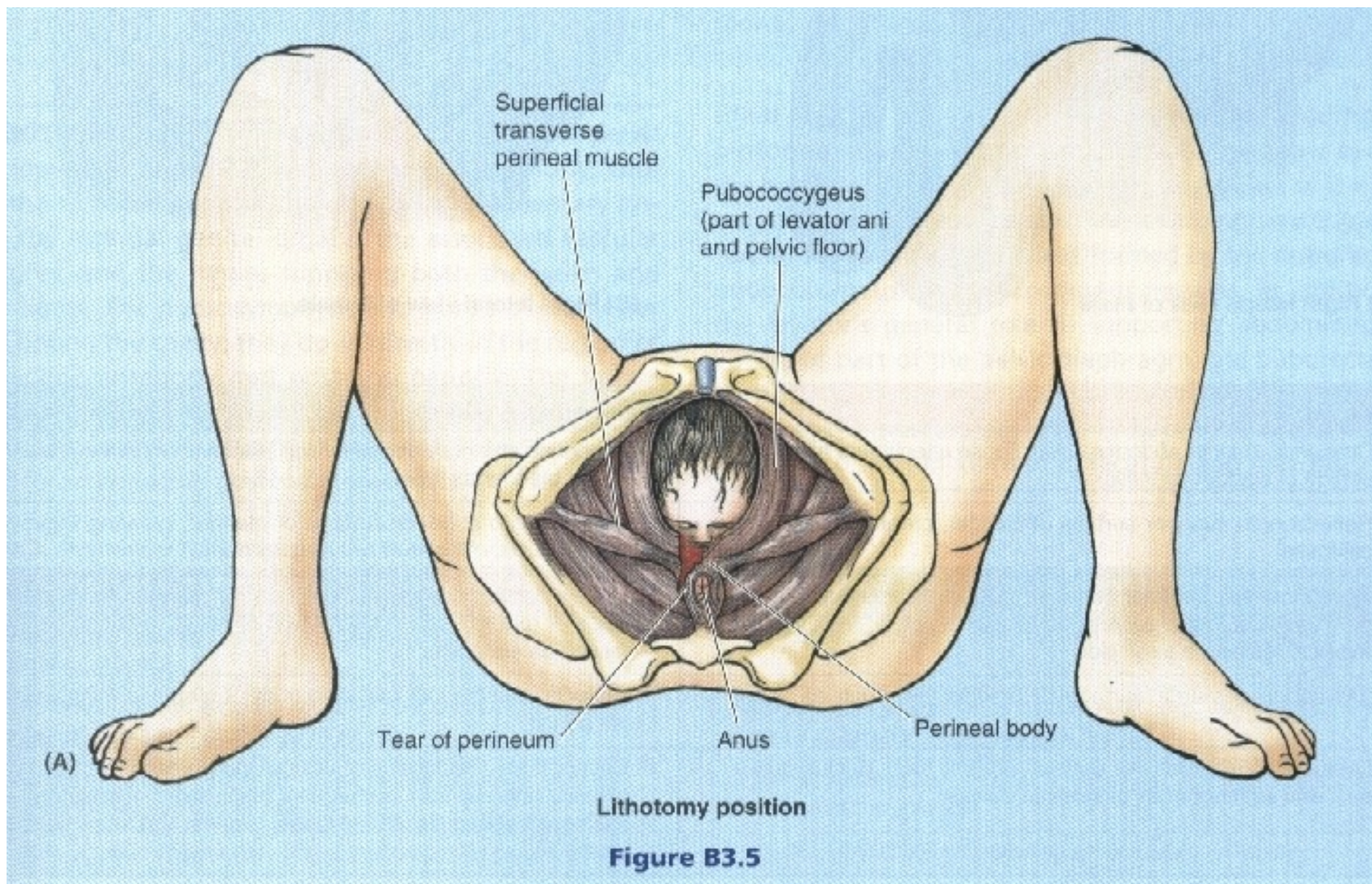


Centrum Tendineum Perinei

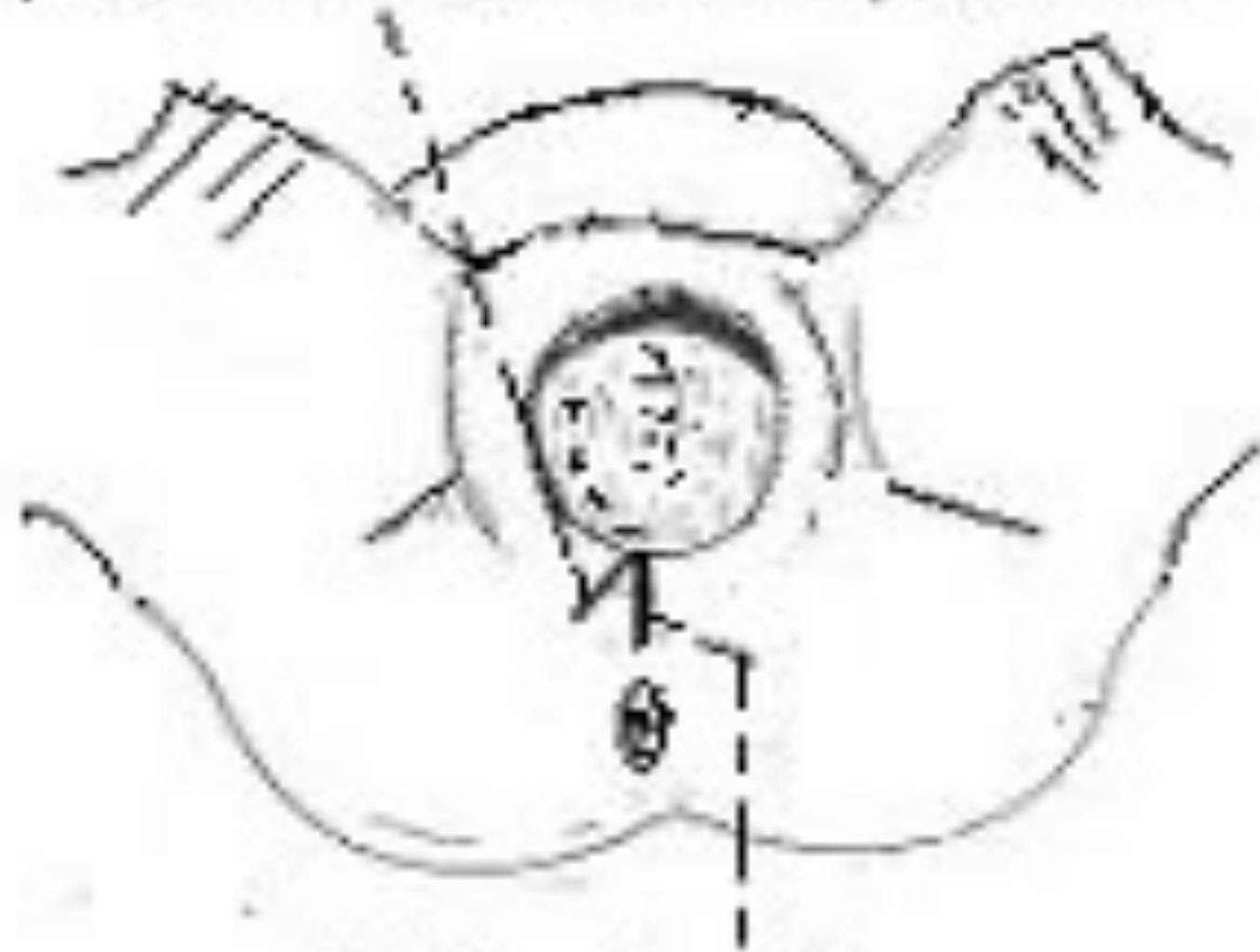
- Nodus fibromuskular, btk limas
 - Pd sudut batas canalis analis dan organ ug dgn septum rectovesicale
 - Otot yg berkumpul:
 - M. levator prostatae (m.pubovaginalis)
 - M.sphincter urethrae
 - M.transversus perinei (suprficialis dan profundus)
 - M.sphinter ani externus (suprficialis dan profundus)
 - M.bulbospongiosus *
- * mengosongkan urethrae, berperan saat miksi, ereksi, ejakulasi

Episiotomi

- Proses persalinan, cegah robekan centrum tendineum, struktur2 sekitar perineum
- Luka pembedahan, mudah ditutup → sayatan perineum
- Sayatan dimulai pd mukosa vagina dan kulit perivaginal di garis tgh dan diteruskan ke arah:
 - Medio latero posterior
 - Posterior/Mediana



episiotomi medio-latero-posterior



episiotomi mediana

Episiotomi

Medio latero posterior

- Dpt diperluas, dpt 2 sisi → >sukar diperbaiki
- Memotong :
 - Mucosa vagina
 - Kulit yg tutupi fosa ischiorectalis
 - M.bulbospongiosus
 - M.transversus perinei superficialis
 - Fascia & m.transversus perinei profunda (bg Ø ug)
 - Kadang2 serabut bg bwh m.pubococcygeus

Episiotomi

Mediana

- Luka mudah ditutup
- Relatif < nyeri
- Centrum tendineum dipotong
- Tidak blh meluas sd serabut2 bg dalam m.sphincter ani externus

Arteri2 pelvis

- A.iliaca communis
- A.iliaca externa

Arteri2 pelvis verum:

- A.iliaca interna
- A. rectalis superior
- A.ovarica
- A.sacralis media

Vena2 pelvis

- V.iliaca externa
- V.iliaca interna
- V.sacralis media

Persarafan pelvis

- Plexus sacralis
- Plexus lumbalis
- Saraf2 otonom

KGB pelvis

→ sesuai pemb.drh. Yg berhub.

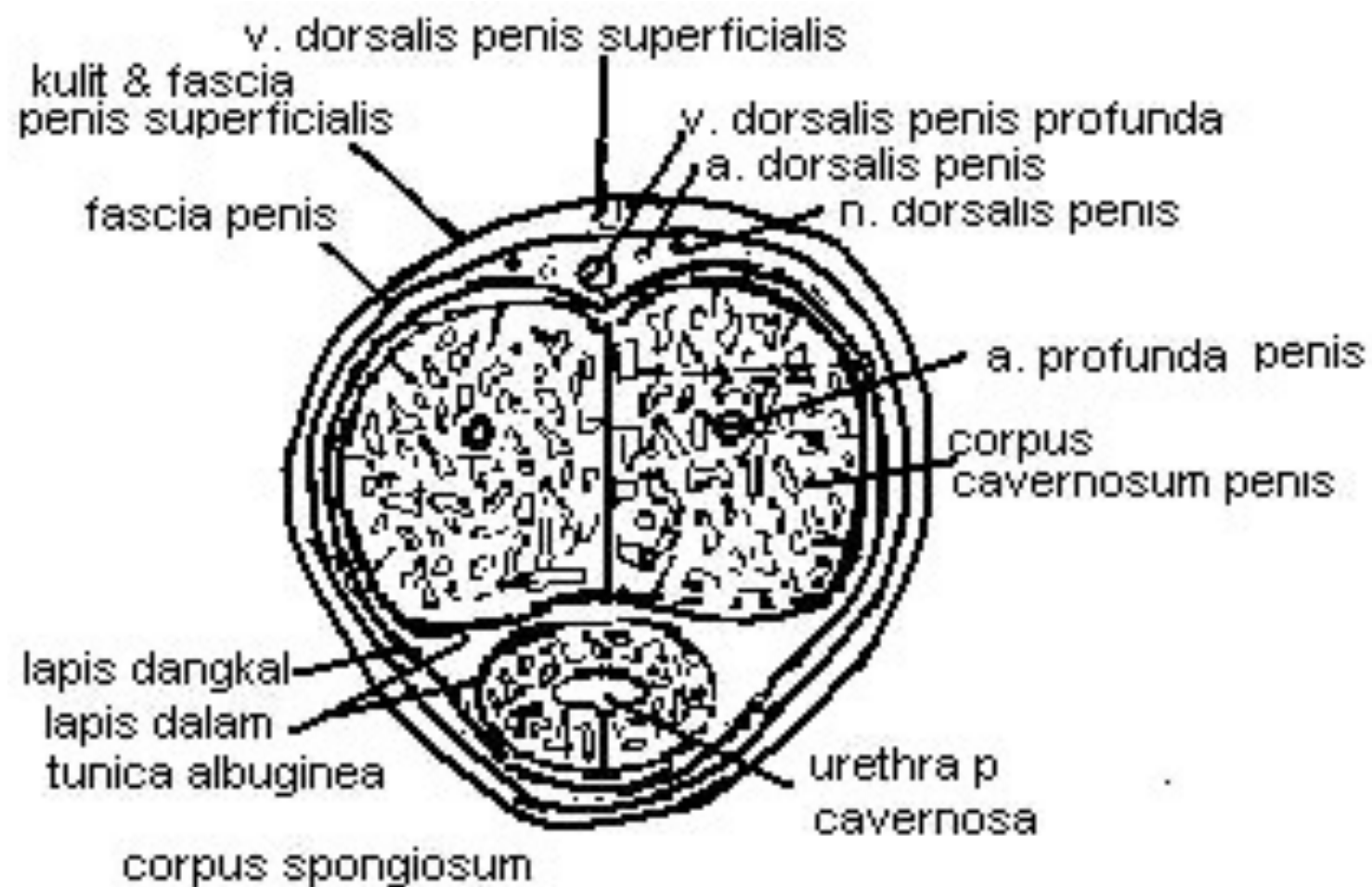
- KGB iliaca externa
- KGB iliaca interna
- KGB iliaca communis

Pendarahan perineum

- A.pudenda interna (cab terminal t'kecil truncus anterior a.iliaca interna)
- A.v.pudenda interna & n.pudendus (Nn.sacrales 2-4) tinggalkan panggul: m.piriformis – m.coccygeus (foramen infrapiriforme)
 - perineum, lwt foramen ischiadicum minus
 - ant.dlm canalis pudendalis (4 cm cranial tuber ischiadicum)

Cabang2 a.pudenda interna

- A.penis (♂ only)
 - A.bulbi urethrae → bulbus penis & otot2 sekitar, posterior corpus spongiosum, gl.bulbourethralis
 - A.urethralis → corpus spongiosum, glans penis, urethra & jar erektile sekitar
 - A.dorsalis penis: dorsum penis, pd 2 sisi v.dorsalis penis → glans penis, kulit, corpora cavernosum & spongiosum (anastomosis dg a.profunda penis)
 - A.profunda penis → crus penis, corpus cavernosum



GENETALIA FEMININA



Genitalia externa

- Mons pubis
- Labia majora
- Labia minora
- Vestibulum vagina
- Clitoris
- Orificium urethrae externum
- Orificium (introitus) vagina
- Hymen vaginae
- Bulbus vestibuli
- Glandula vestibularis major (Bartholini)

Vulva

A- Urethra

Opening for passing urine

B- Vagina

Allows for flow of menstrual blood
& sexual intercourse

Anus

Opening for passing feces

C- Clitoris

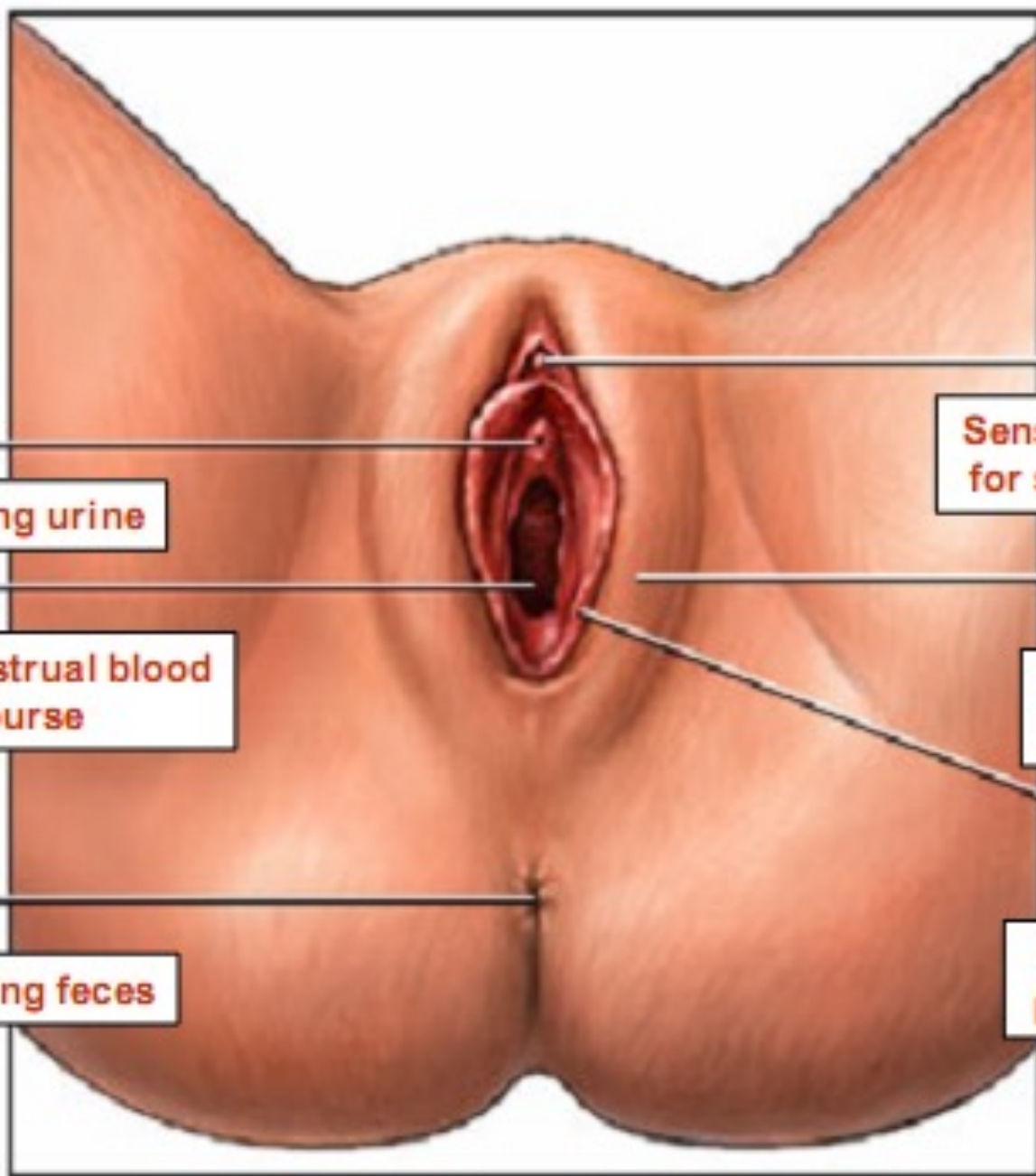
Sensitive bump allows
for sexual stimulation

D- Labia
majora

Large lips (with hair)
protect vaginal area

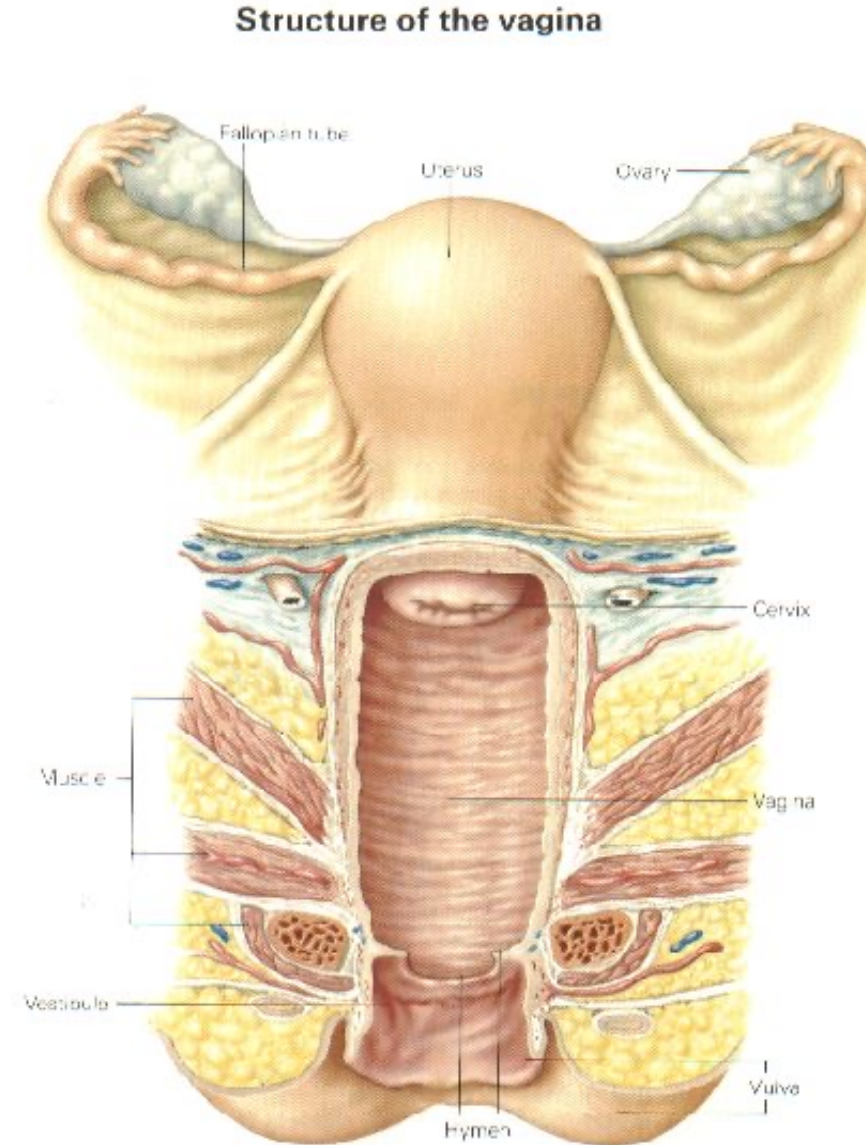
E- Labia
minora

Small lips (no hair)
protect vaginal area



Vagina

- Organ kopulasi ♀
- Mengeluarkan ekskresi uterus
- Jalan keluar janin
- Vulva → cranial & dorsal
- Pj ± 8 cm
- Selaput tipis mucosa sekitar orificium vaginae: Hymen
- Rongga vagina sekitar cervix uteri
 - Fornix anterior
 - Fornix posterior
 - Fornix lateralis ka & ki



Vagina

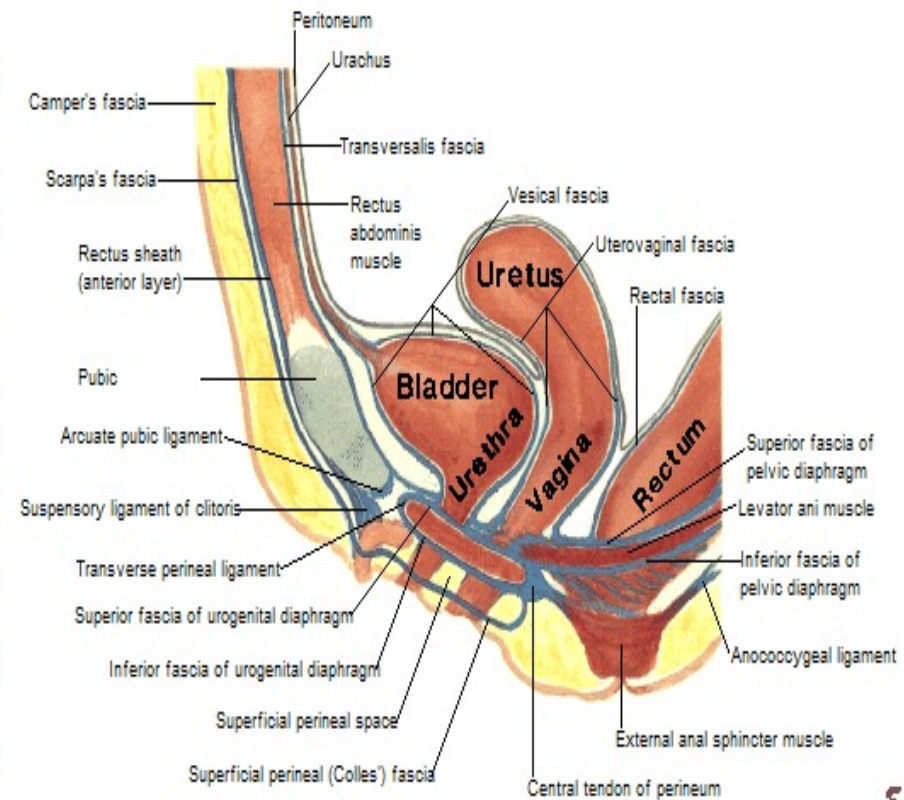
Hub dg ureter:

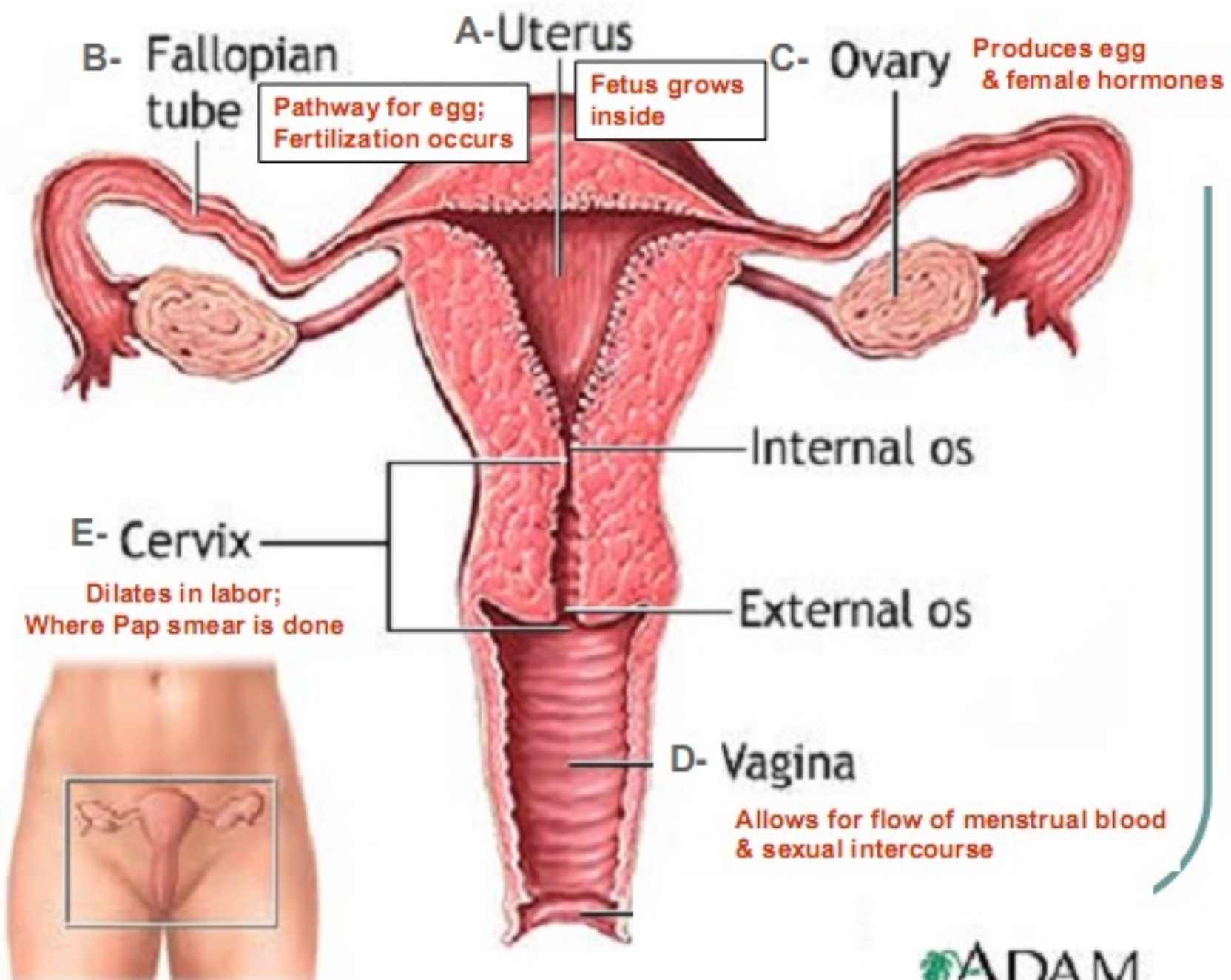
- Ureter melintas antero medial → fundus vesica urinaria
- Berbatasan dg fornix vaginae lateralis
- Saat bermuara ke vesica urinaria, ureter berada di sebelah anterior vagina

Hub dg urethra:

- Posterior dari urethrae
- Rentan infeksi – “kebersihan BAK”

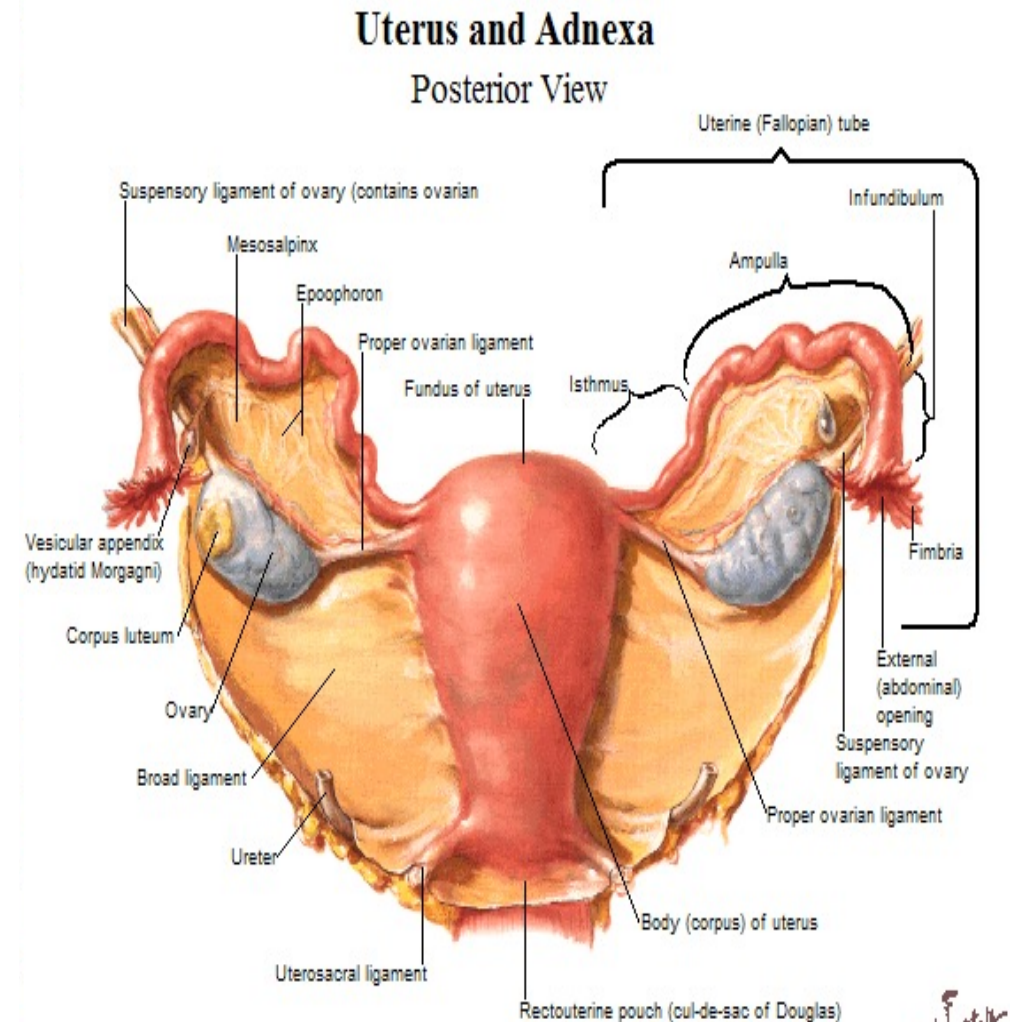
Perineum of Female
Midsagittal Section





Ovarium

- ~testis
- Almon, 3x1,5x1 cm
- Permukaan lat & med, ext. tubaria & uterina, tepi mesovaricus & libera
- Letak: fossa ovarica (lekuk pd ddg lat pelvis)
- Nullipara: sumbu panjang vertical
- Permukaan:
 - Sblm akil balik: licin
 - Stlh akil balik: kasar → degenerasi corpora lutea
 - Menopause: kisut & kecil



Ovarium

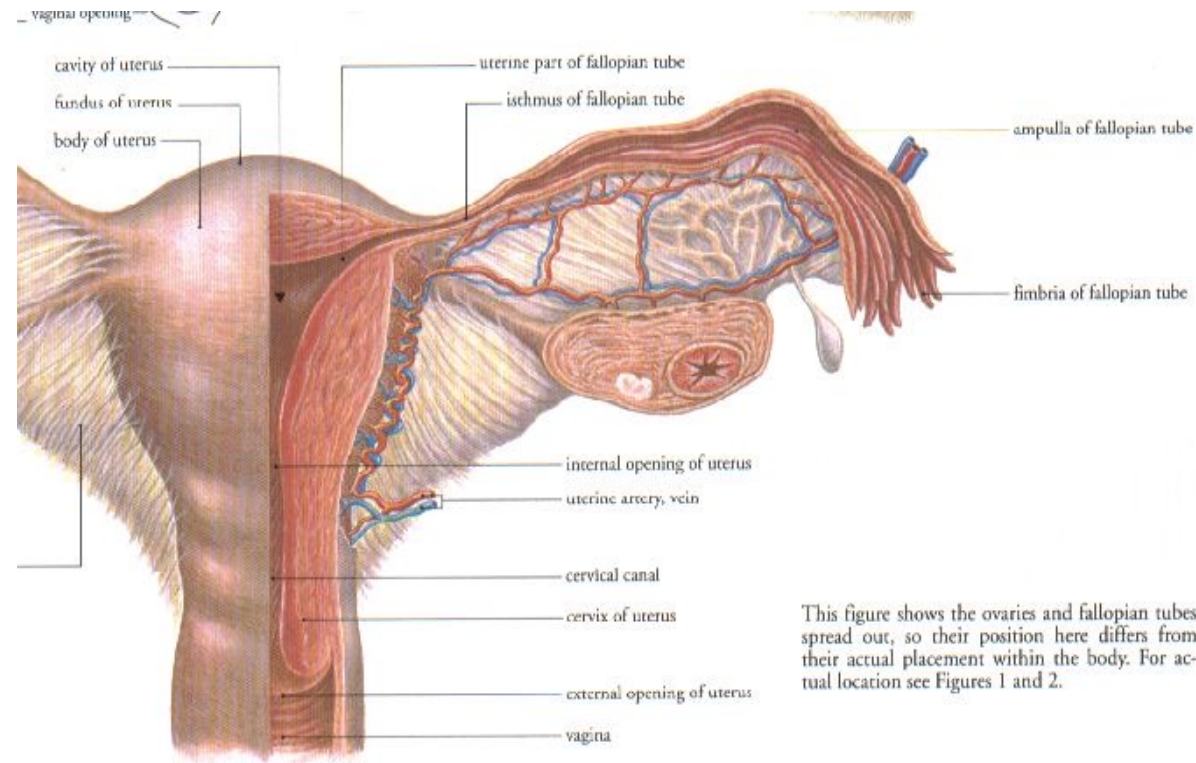
- Lig.suspensorium ovarii (infundibulo pelvicum):
 - bg lig.latum mesovarium
 - ddg lateral panggul,
 - tdpt a.v.n.Ovarica
- Lig.ovarii proprium :
 - ddg lat uterus
 - permukaan medial ovarium

Batas-batas Ovarium

- Anterior:
 - margo mesovaricus → lig.latum o/mesovarium, hadap ke lig.umbilicale laterale
- Posterior:
 - margo libera hadap ureter & a.iliaca interna
- Superior:
 - extremitas tuba batas dg fimbria ovarica tuba uterina & lig.suspensorium ovarii. Melintas a.v.iliaca interna
- Lateral:
 - fascia pelvis lapis parietal
- Medial:
 - sbgn bsr tertutup tuba uterina
- Recessus peritoneal, ovarium – mesosalphinx → bursa ovarium

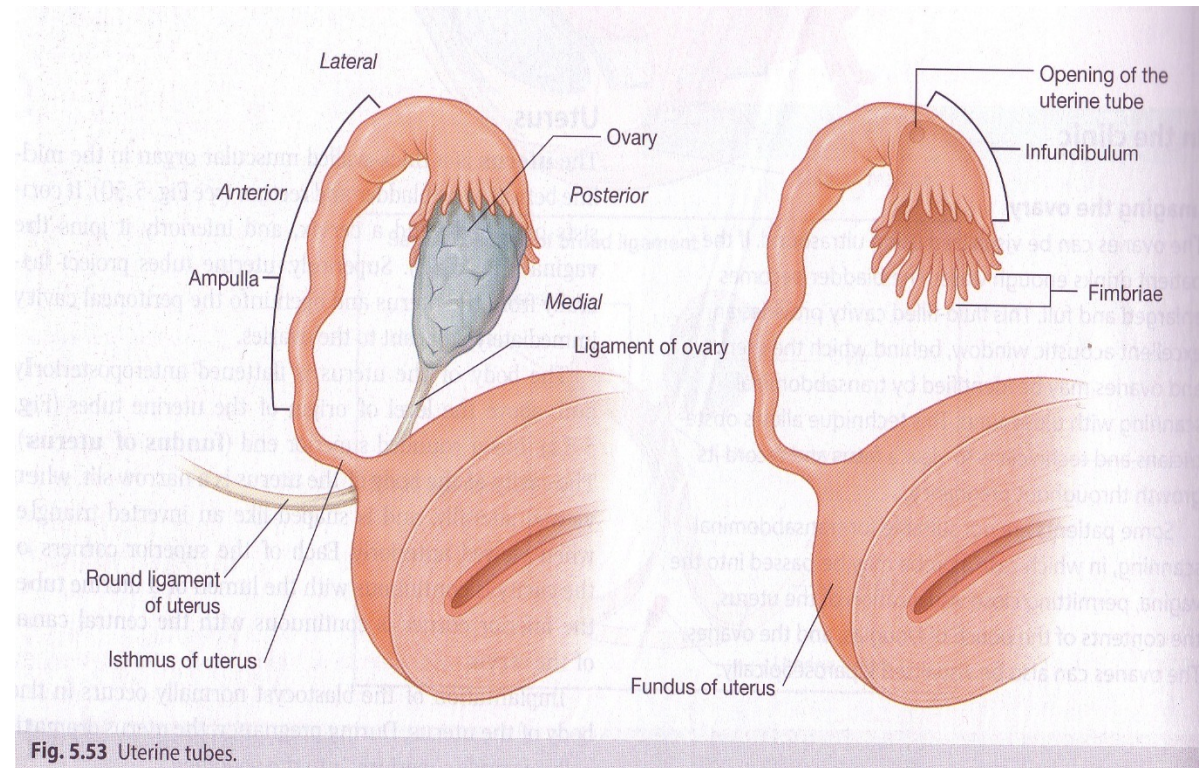
Tuba uterina

- 2 buah, $\pm$ 10 cm
- Letak: tepi cranial lig.latum
- Cavum pelvis – cavum uteri



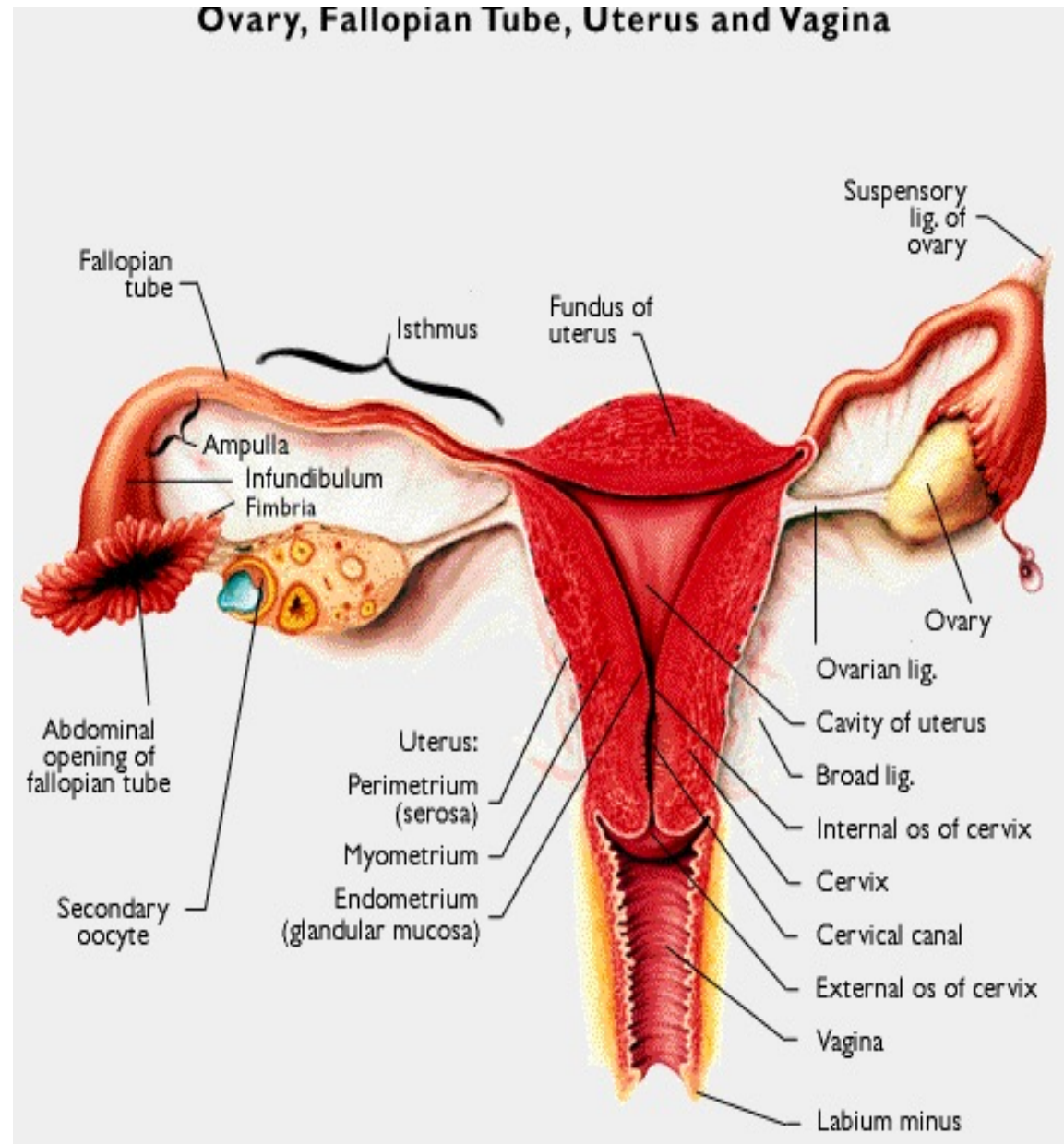
Tuba uterina

- Infundibulum:
 - ujung lat
 - cerobong asap
 - Letak: post lig.latum uteri
 - Fimbriae: menyelubungi ovarium
- Ampulla:
 - Bg terlebar
 - fertilisasi



Tuba uterina

- Isthmus:
 - Paling sempit
 - Lateral uterus
- Intramural:
 - Tembus ddg uterus

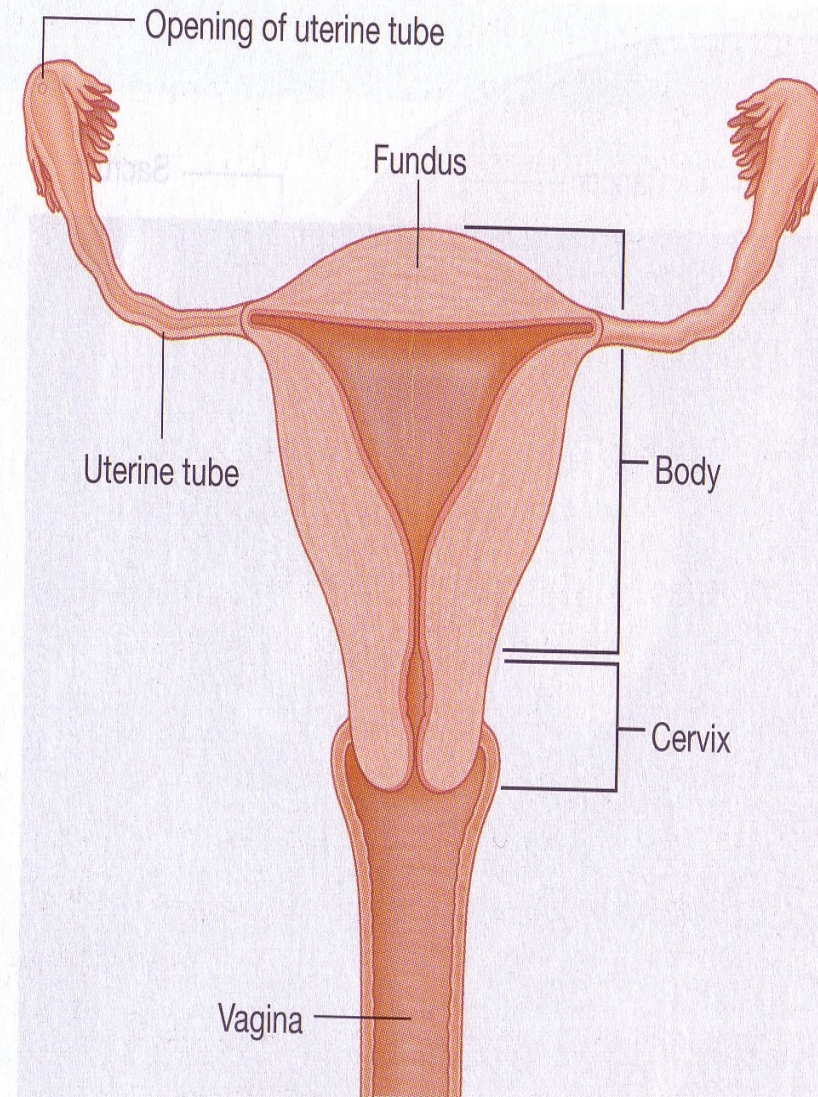


Tuba uterina

- Pendarahan
 - A.uterina (cab a.iliaca interna)
 - A.ovarica (cab aorta)
 - Vena2 ikut nadi
- Pembuluh limf:
 - ikut arteri
 - →nodi lymphatici iliaca internal
 - →nodi lymphatici paraaortae
- Persarafan: cabang2 plexus hypogastricus inferior
- Fungsi :
 - Terima ovum
 - Terima sperma
 - fertilisasi

Uterus

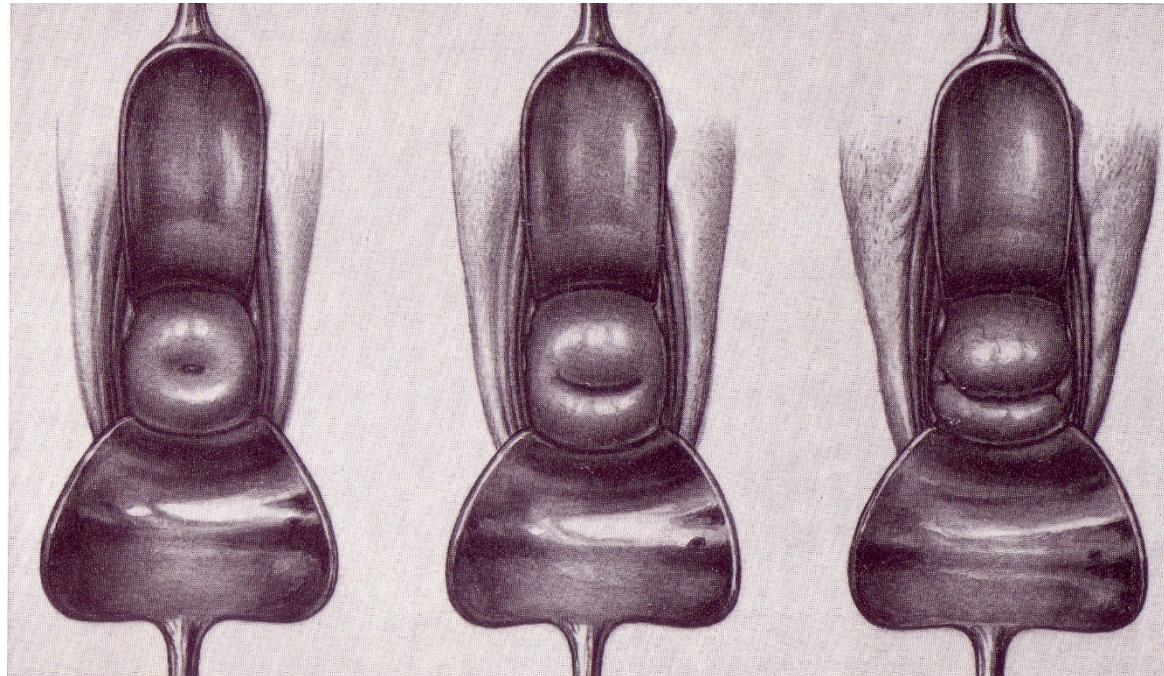
- Bentuk: buah pir, berongga, ddg otot
- Nullipara
 - Pj: 7,5 cm
 - L: 5 cm
 - Tebal: 2,5 cm
 - 30-40 g
- Fundus uteri: di atas muara tuba
- Corpus uteri: di bwh muara tuba
- Cervix uteri: bg bwh, sempit, tembus ddg ventral vagina
 - Pars supravaginalis cervicis: atas vagina
 - Pars vaginalis: dalam vagina



Uterus

Cervix uteri

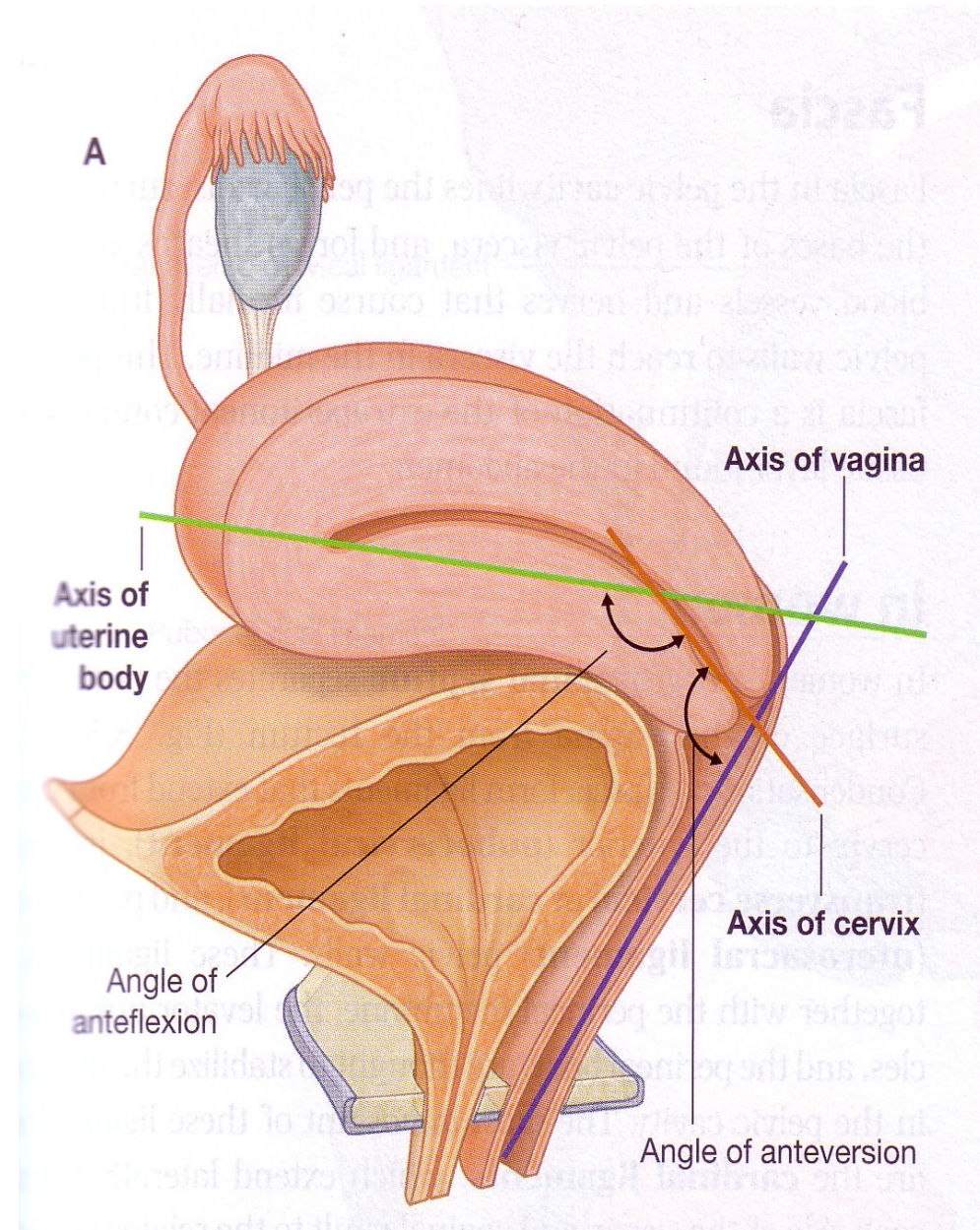
- Canalis cervicis: cavum uteri (ostium internum) – vagina (ostium externum)
- Ostium externum
 - Nullipara: sirkuler
 - Multipara: lintang



Uterus

Posisi N

- Sumbu pj uterus – vagina:
 - sudut $\pm 90^\circ$
→ anteversi uterus
- Sumbu pj uterus – cervix:
 - sudut $\pm 170^\circ$
→ antefleksi uterus
- Berdiri, vu kosong → ventral, bid horizontal

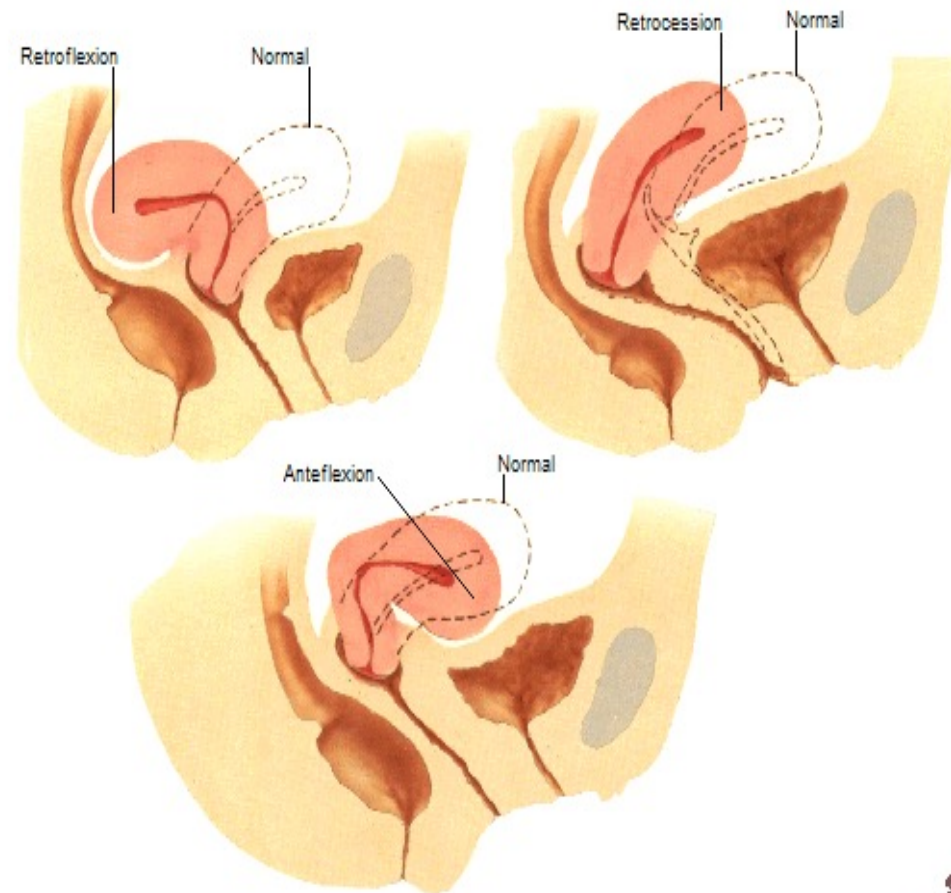


Uterus

Posisi $\neq$ N

- Fundus & corpus $\rightarrow$ dorsal $\rightarrow$ cavar rectouterina (Duoglasi) $\rightarrow$ retrovers
- Sumbu corpus – cervix uteri $>170^\circ$: retrofleksi

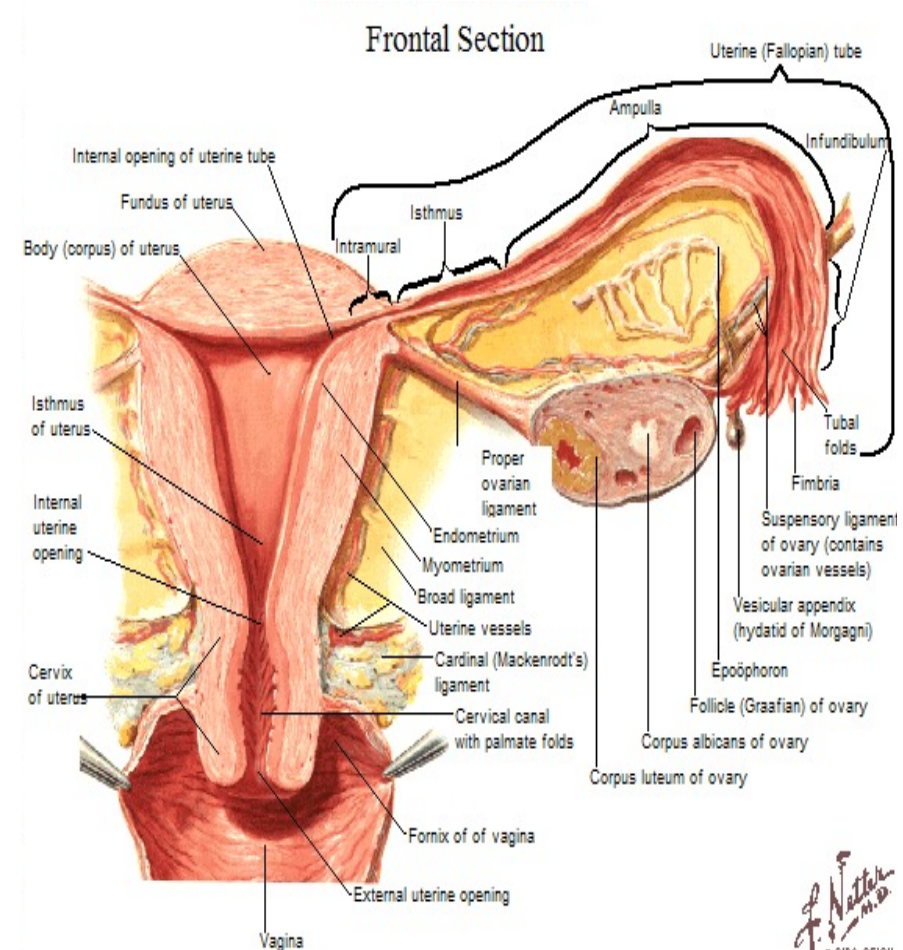
Uterus [Continued]
Variations in Position



Uterus

Struktur

- Luar: diliput peritoneum
 - Kec: bg anterocaudal bwh ostium internum (cervix uteri)
- Dinding: myometrium
 - Otot polos, sedikit jar ikat
- Dalam: membrana mucosa → endometrium
 - Lgs melekat myometrium → ≠ submucosa
 - Siklus haid



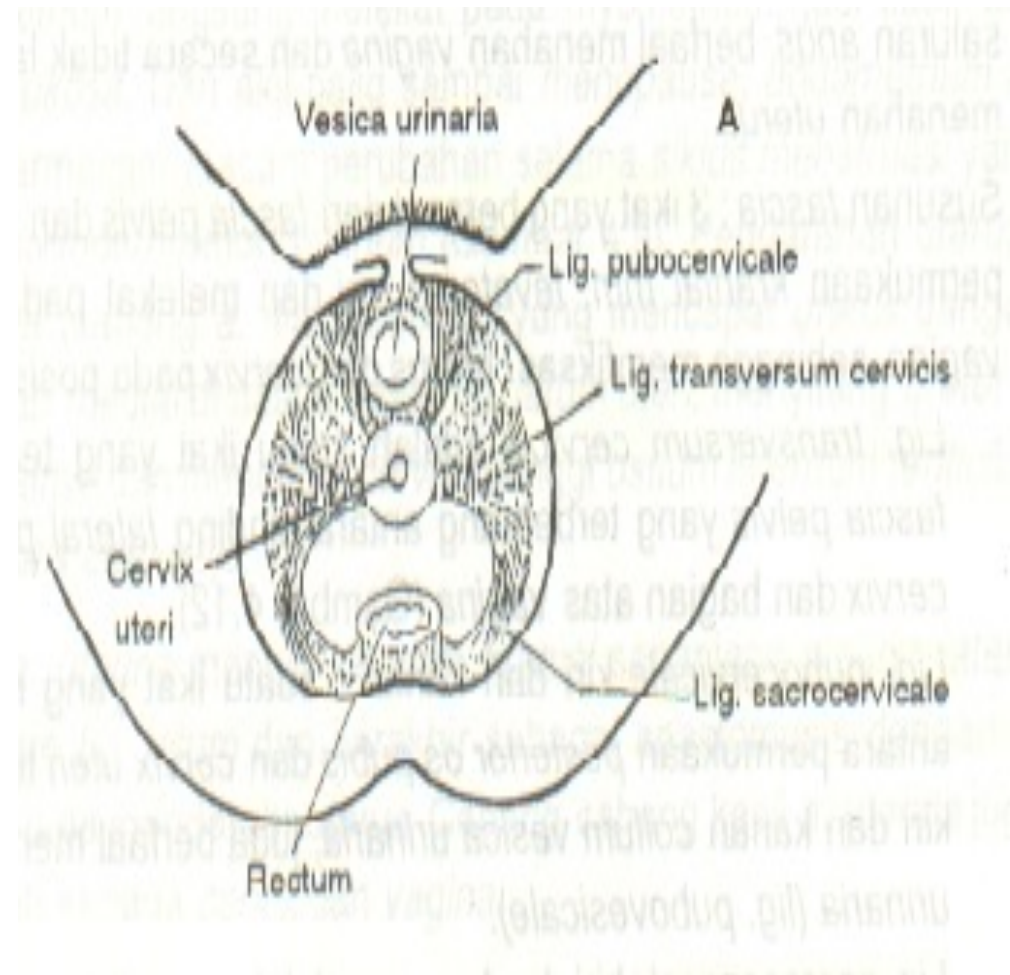
Uterus

Alat2 penopang

- Otot2: m.levator ani
- 4 Jar ikat (3 asal fascia pelvis)

Jaringan ikat penopang uterus:

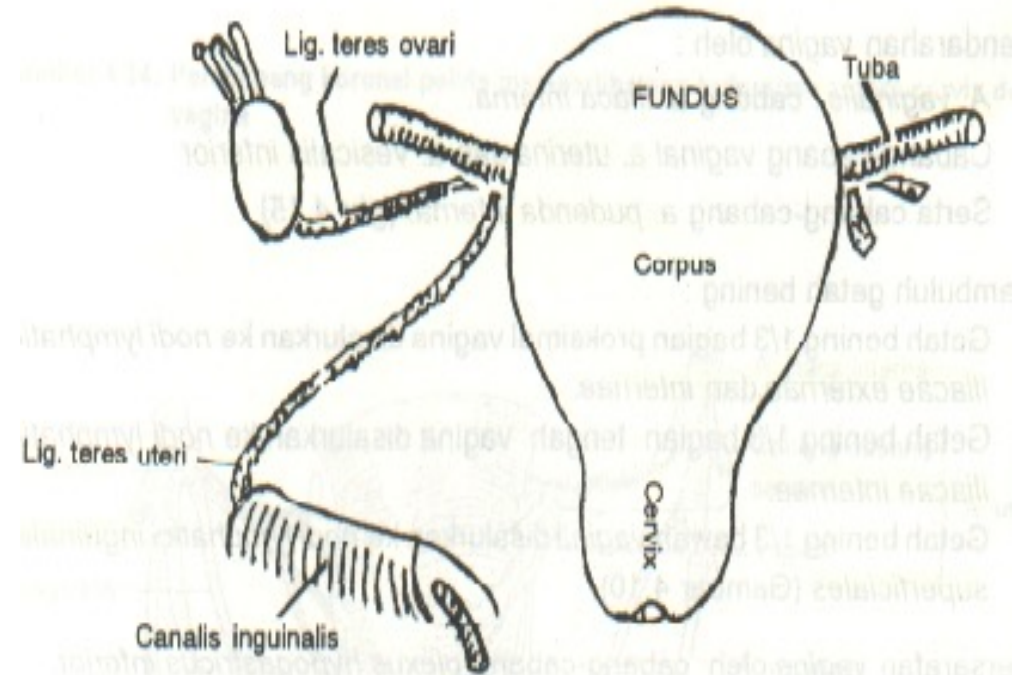
- Lig.transversum cervicis: ddg lat pelvis – cervix uteri & cranial vagina
- Lig.pubocervicale: post os pubis – cervix uteri
 - letak sisi ki, ka collum vesica urinaria → jg tahan vesica urinaria (lig.pubovesicale)



Uterus

Jar ikar penopang uterus

- Lig.sacrocerivale: os sacrum – cervix uteri & cranial vagina
 - Lipatan ki, ka excavatio rectouterina
- Lig.teres uteri: sudut laterosuperior uterus – anulus inguinalis profundus – canalis inguinalis – anulus inguinalis superficialis – jar subkutan labium majus
 - Asal: sisa embrional bg bwh gubernaculum
 - Tahan uterus posisi anteversi, antefleksi
 - Tegang selama kehamilan



Gambar 4.13. Gambar lig. teres ovarii dan lig. teres uteri.

Uterus

- Anak-anak: kecil
- Akil balik: membesar (estrogen & progesteron dr ovarium)
- Menopause: atrofi
- Hamil:
 - Pembesaran: hipertrofi myometrium, hsl konsepsi
 - >3bln → rongga abdomen
 - Bln 9: processus xiphoideus

Uterus

Atreri

- A.uterina (cab a.iliaca interna)
 - →medial dlm dsr lig.latum uteri
 - Silang ureter di lateralnya
 - →cervix, setinggi ostium internum
 - →Cranial spj lat uterus dlm lig.latum
 - Anastomosis dg a.ovarica
 - Cab2 kecil jg → cervix & vagina

Vena

- V.uterina
 - Ikut a.uterina
 - Muara → v.iliaca interna

- Dan sesungguhnya Kami telah menciptakan manusia dari saripati tanah. Kemudian kami jadikan saripati itu air mani (yang disimpan) dalam tempat yang kokoh (rahim)

(QS al Mukminun 12-13)

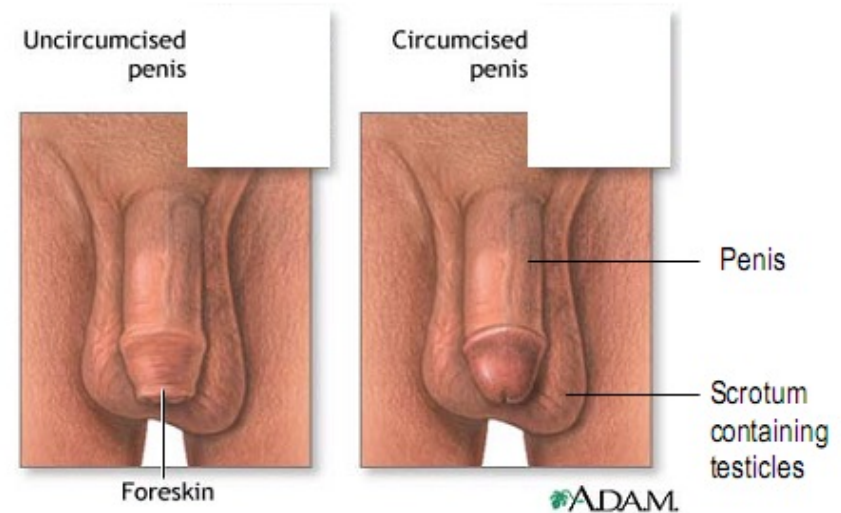
ORGAN GENETALIA MASCULINA

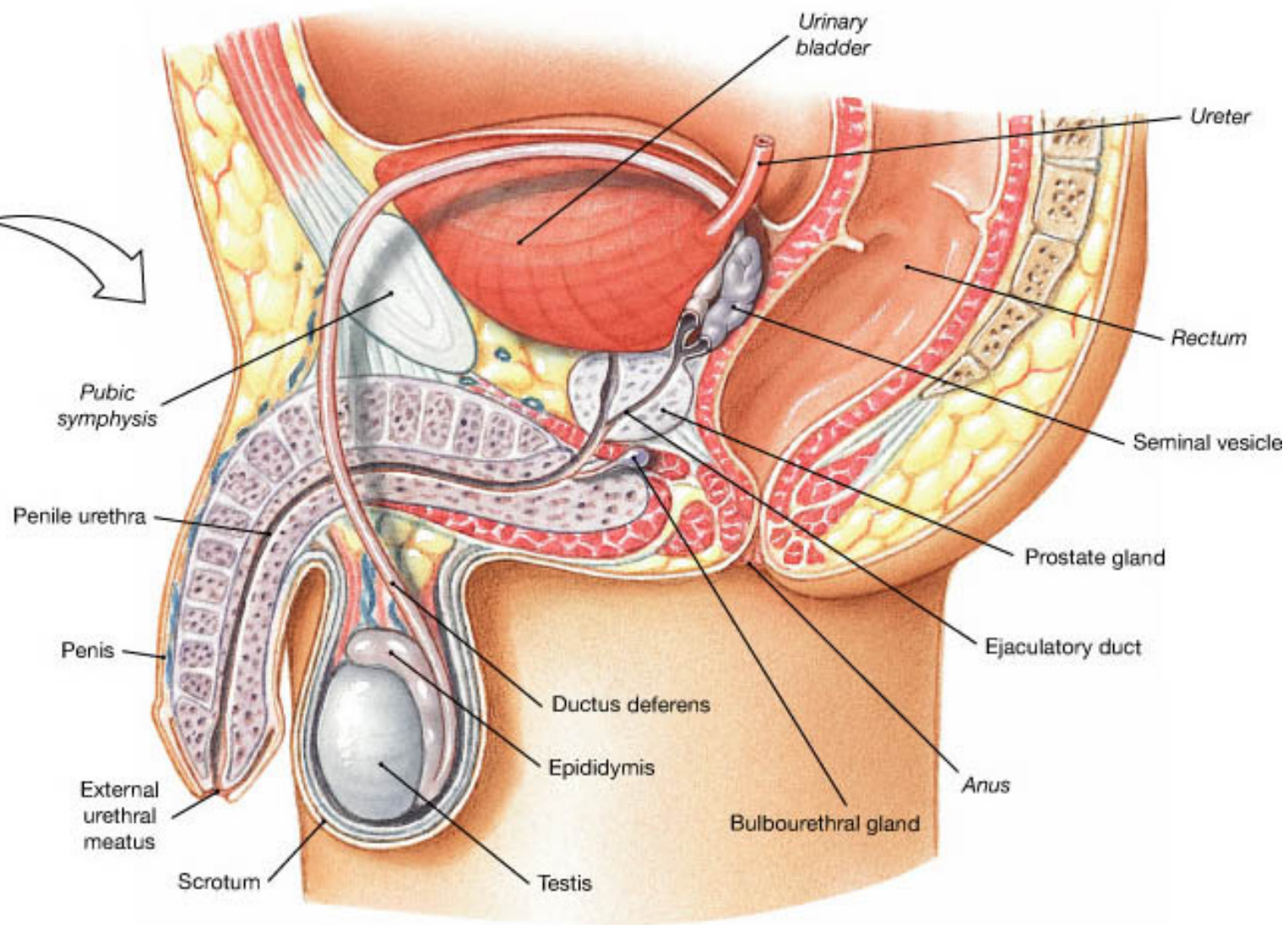
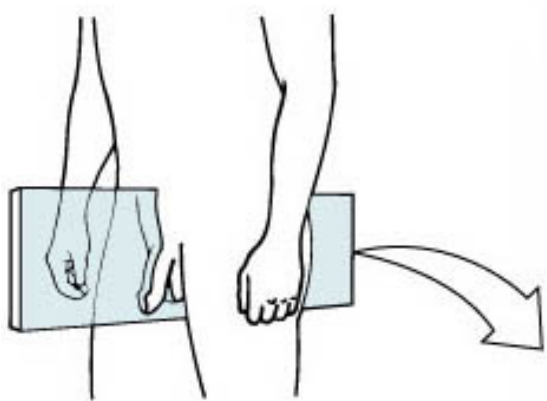
1. GENETALIA EXTERNA :

1. Scrotum
2. Penis

2. GENETALIA INTERNA :

1. Testis
2. Epididymis
3. Vas deferens/ductus deferens
4. Vesicula seminalis
5. Ductus ejaculatorius
6. Gl. Prostatica
7. Gl. Bulbourethralis (comperi)





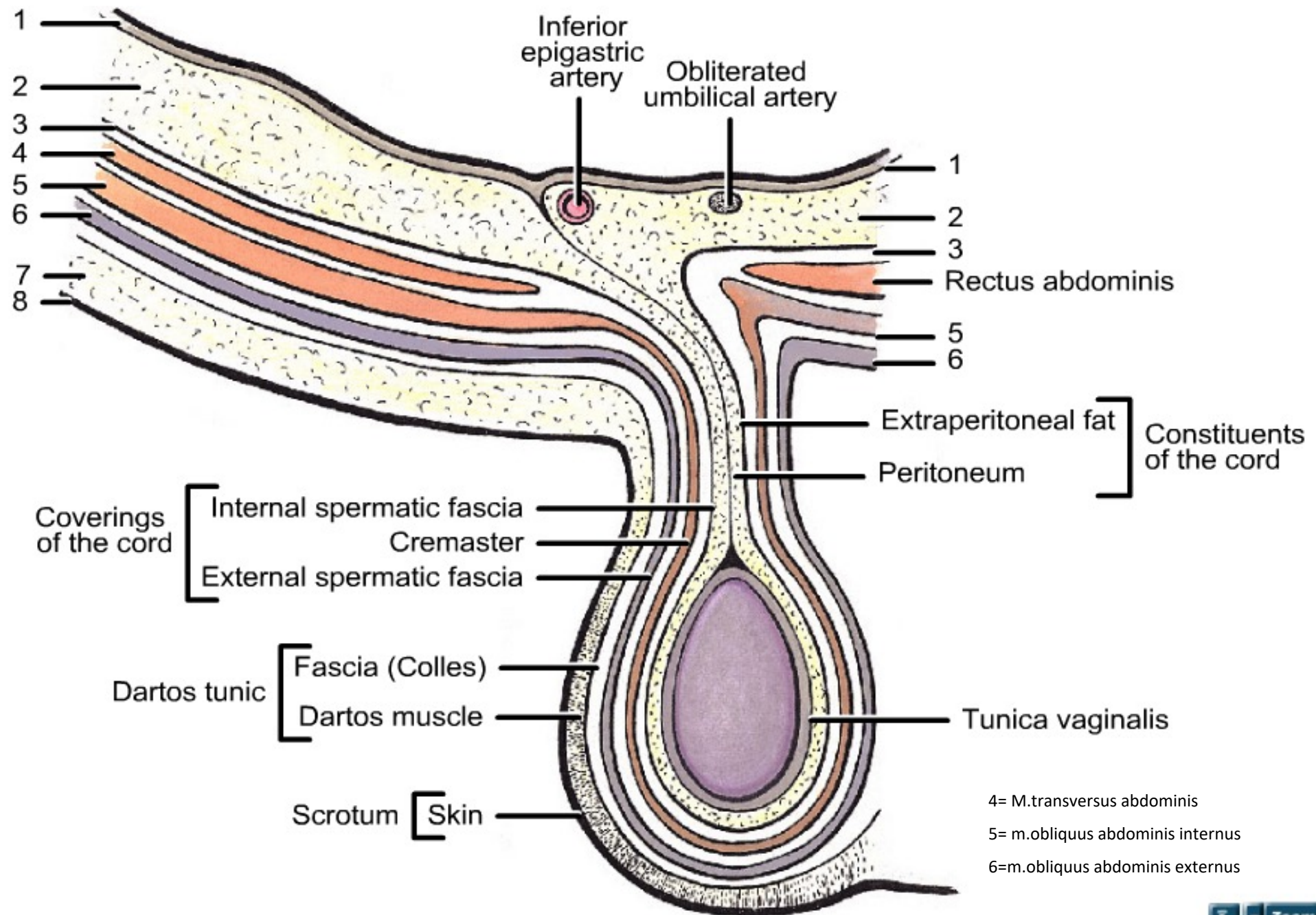
Scrotum

Lapisan2 ~ lapisan2 ddg dpn abd:

- Kulit scrotum
- M.dartos ~ fascia abdominalis superficialis
- Fascia spermatica externa ~ aponeurosis m.obliquus abdominis externus
- M.cremaster ~ m.obliquus abdominis internus
- Fascia spermatica interna ~ fascia transversalis

Scrotum

- M.transversus abdominis ≠ scrotum
- M.dartos: lap fascial disusupi otot polos tipis, melekat erat kulit scrotum → persarafan otonom
- Ikat fibromuskular (scrotal ligament) membentang dr lapisan dartos – kutub bawah testis → termaregulator
- Fascia spermatica interna melekat lapis parietal tunica vaginalis propria



Scrotum

- **Pendarahan:**

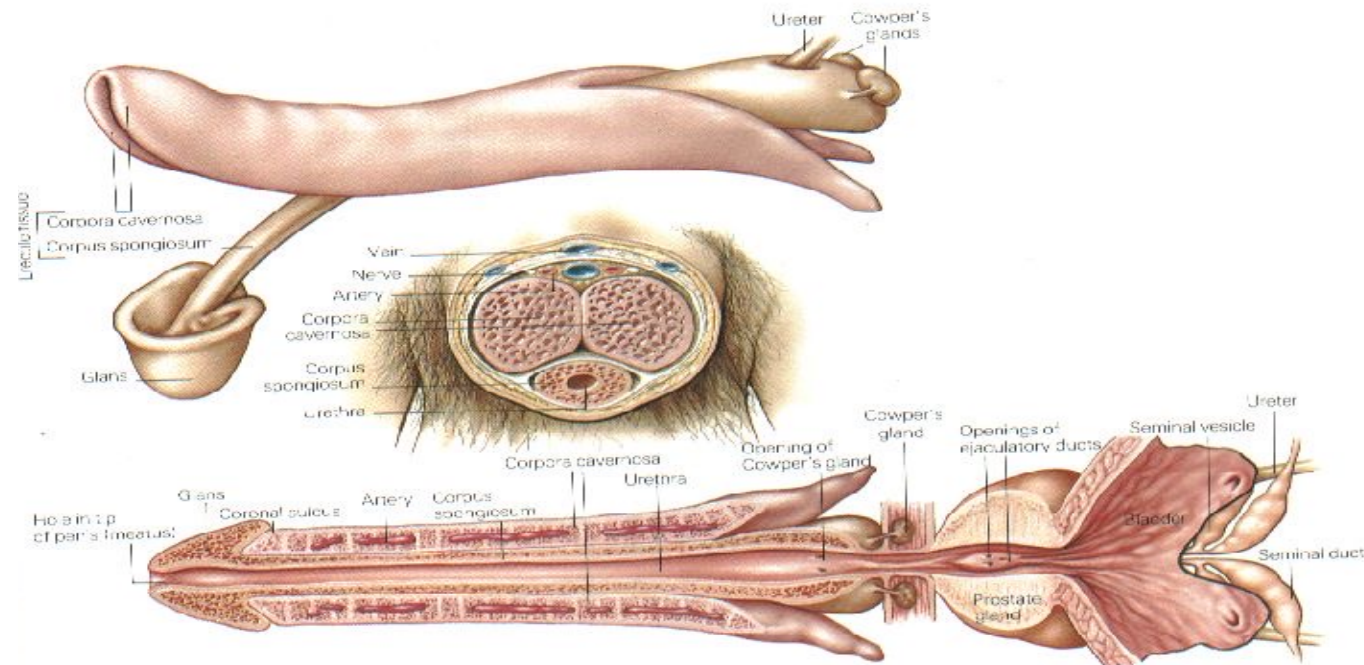
- Aa.pudenda externa (cab a.femoralis)
 - Cab scrotalis post a.pudenda interna
 - Cab cremaster a.epigastrica inferior
- Vena2:ikuti nadi sesuai
 - Pmblih getah bening → nnll.inguinales

- **Persarafan:**

- N.scrotalis anterior (cab n.ilioinguinalis)
- N.pudenda externa (cab r.genitalis n.genitofemoralis)
- N.scrotalis posterior (cab nn.perinei)
- R.perinealis n.cutaneus femoris posterior

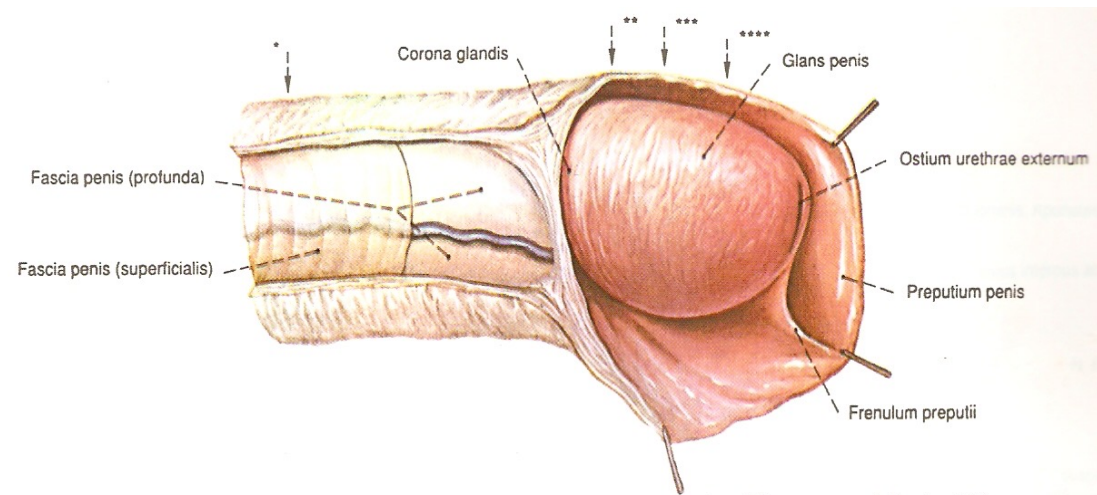
Penis

- Organ kopulasi pria
 - Radix: melekat pd regio Δ urogenitale perineum
 - Corpus: tertutup sempurna o/kulit
 - glans penis: btk kerucut bulat



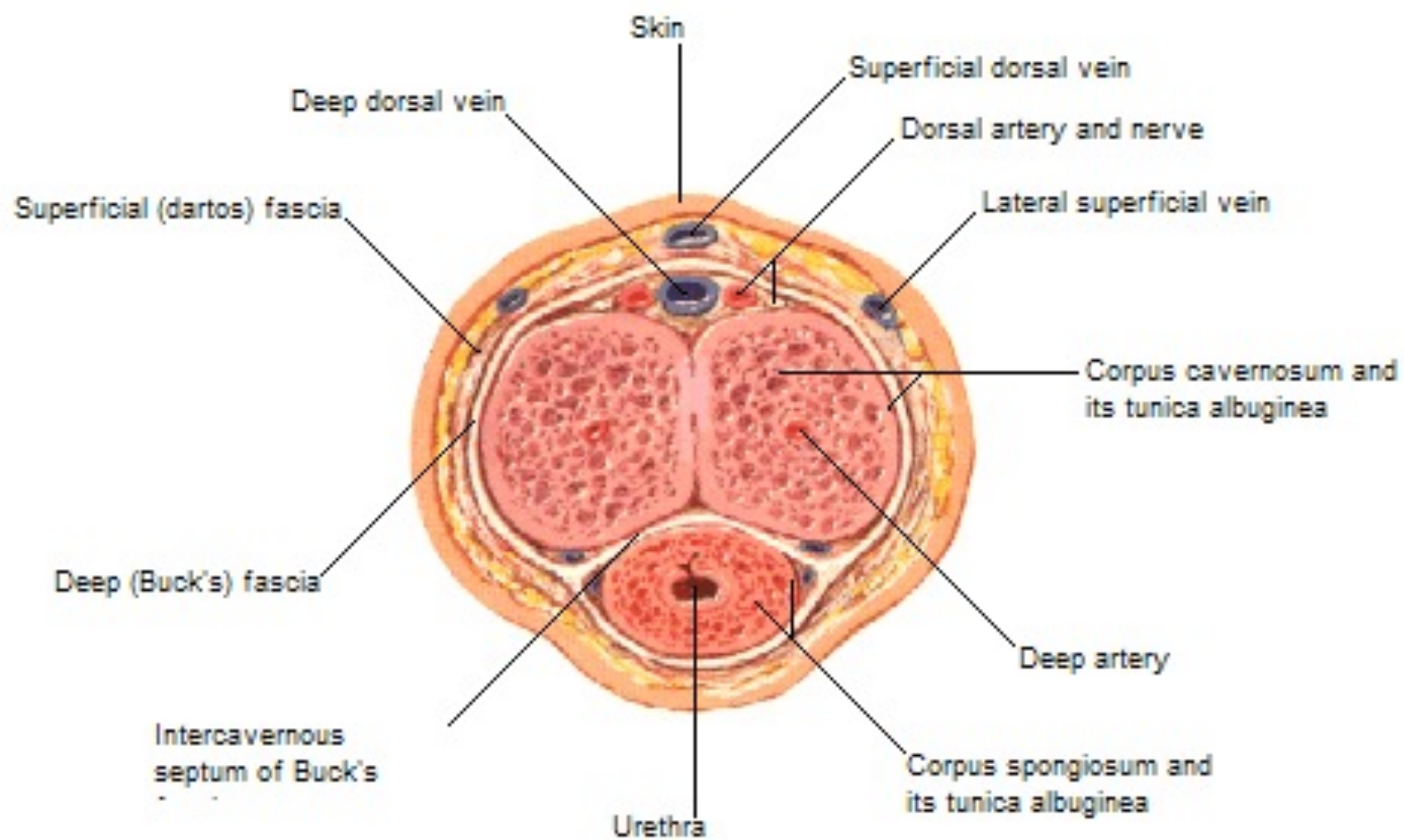
Penis

- Kulit penutup glans penis terlipat: preputium penis
- Bg dlm lapis preputium lekat glans penis grs tengah permukaan urethral, lipatan mucosa: frenulum preputii → sensitivitas↑↑
- Sircumsisi: preputium dipotong dilepaskan, frenulum preputii ≠
- Celah preputium – glans penis: kantong preputial
- Corona glandis & colum penis: kelenjar2 sebacea → smegma



Penis

- Nadi suplai ruang2 cavernosa: a.profunda penis & cab2 a.dorsalis penis, tembus tunica albugenia spj dorsum penis t'ut dkt glans
- Corpus spongiosum: a.bulbi urethrae & a.urethralis
- Darah balik kumpul v. dorsalis penis profunda → plexus prostaticus
 - Persarafan: n.pudendus & plexus pelvici
 - Getah bening kulit penis → nll.inguinales superficiales
 - Getah bening jar erektile & urethra pars cavernosa → nll.iliaci interni

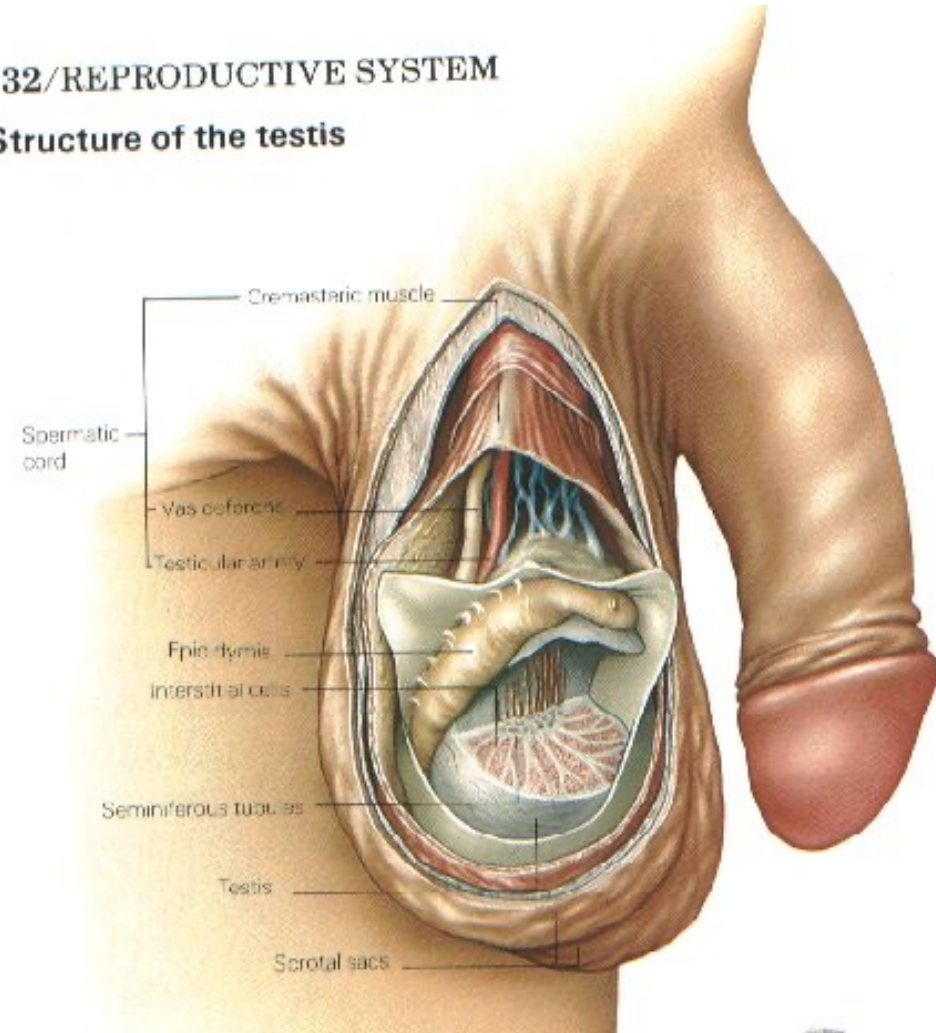


Testis

- Pembentukan spermatozoa, hormon tu testosteron
- Digantung dlm scrotum o/ jar2 scrotum & funiculus spermaticus
- Pj 4-5cm; lb 2,5cm; Øant-post 3cm
- Berat 10,5 – 14 g
- Bulat telur, sb pj ke atas & ventrolateral, bwh & posteromedial
- Lap pembungkus: tunica vasculosa, tunica albugenia, tunica vaginalis propria

132/REPRODUCTIVE SYSTEM

Structure of the testis

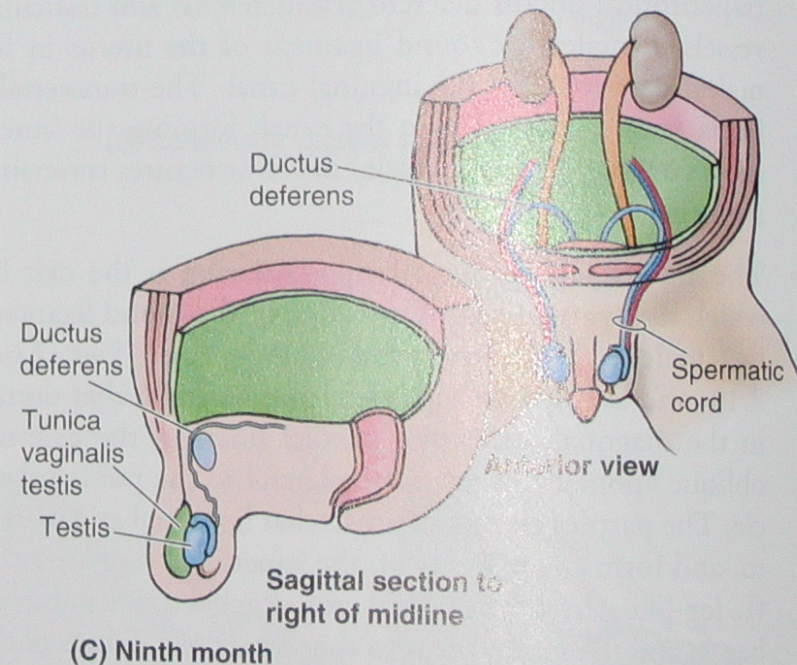
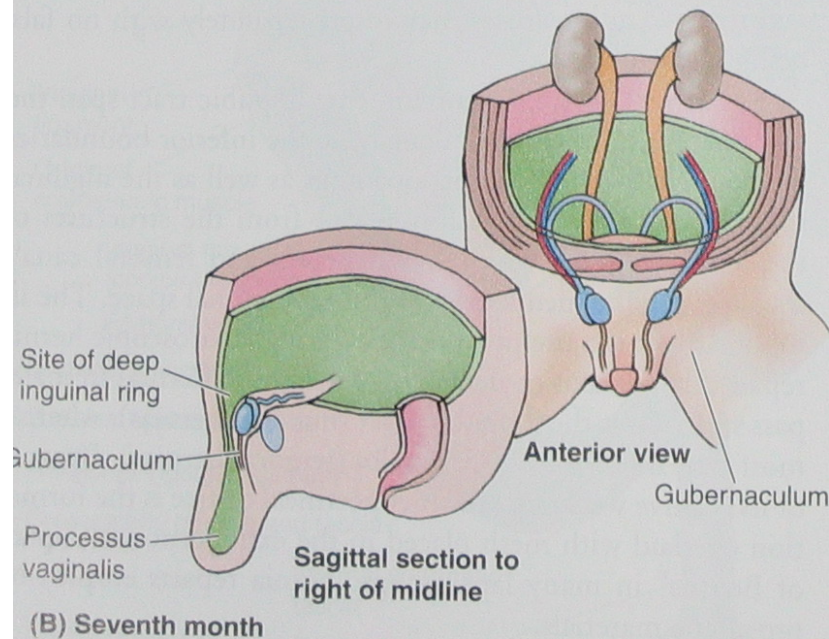
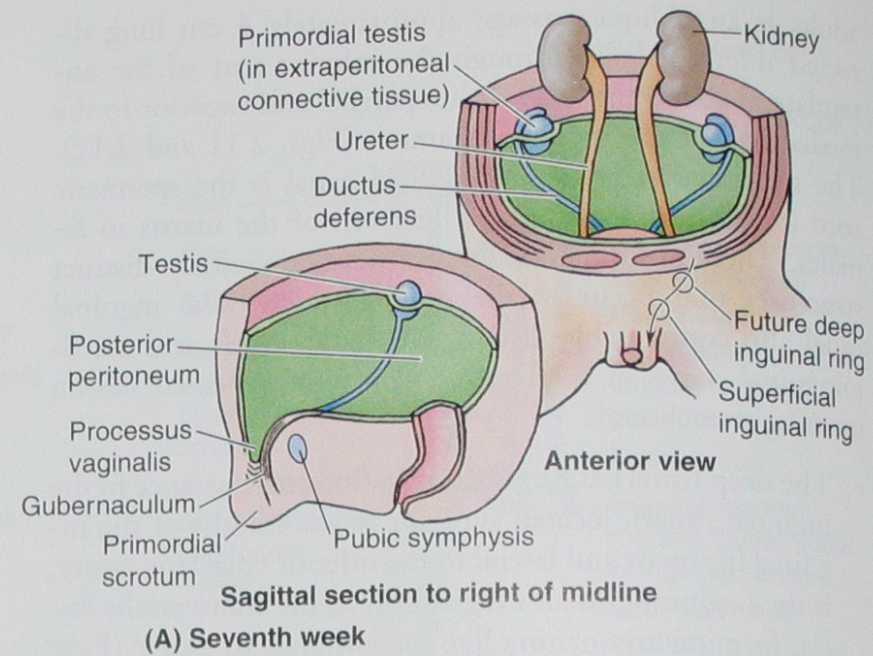


Testis

Tunica vaginalis propria

- Ujung bwh processus vaginalis peritonei → decensus testis
- Bg prox proc vag peritonei (anulus inguinalis profundus – dkt testis): obliterasi → lig.vaginale (bg ant funiculus spermaticus)
- Rongga tunica vaginalis propria: sedikit cairan → bergerak bebas dlm scrotum
- Kelainan2:
 - Hernia scrotalis kongenital
 - Hidrokel
 - Kista hidrokel

Figure 2.13. Formation of the inguinal canals and descent of testes. **A.** In a 7-week embryo, the testis has not yet descended from the posterior abdominal wall. **B.** A fetus at 28 weeks (seventh month) shows the processus vaginalis and the testis passing through the inguinal canal. The processus vaginalis carries fascial layers of the abdominal wall before it. Observe that the testis passes posterior to the processus vaginalis, not through it. **C.** In a newborn infant, obliteration of the stalk of the processus vaginalis has occurred. The remains of the processus vaginalis have formed the tunica vaginalis of the testis, and the remnant of the gubernaculum has formed the scrotal ligament or disappeared.

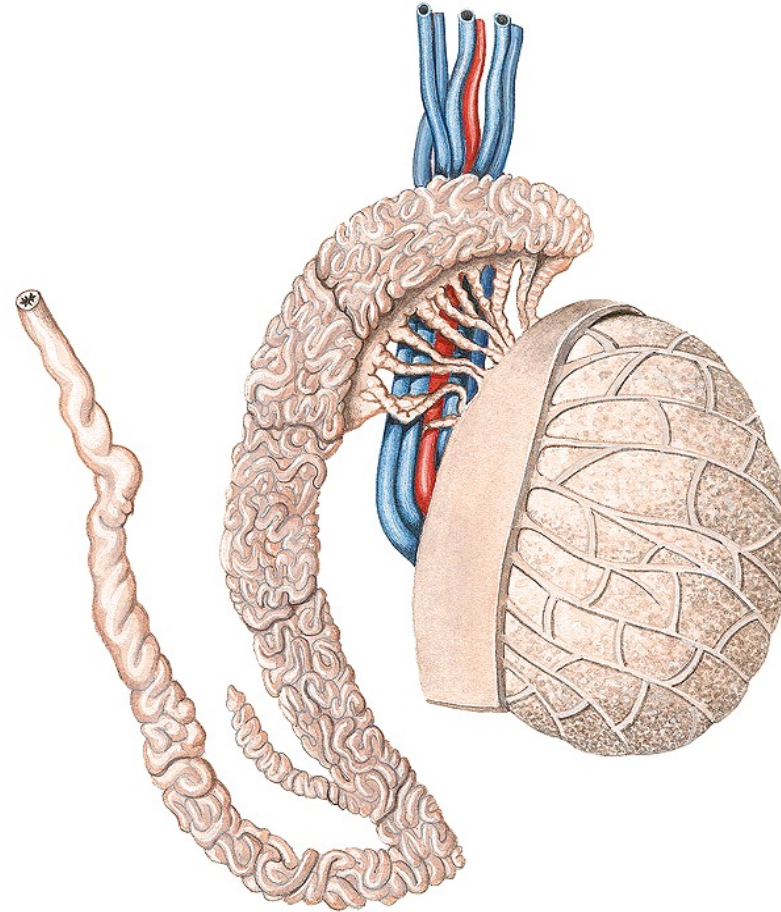


Testis

- Pendarahan: a & v. testicularis
- A.testicularis: cab aorta abdominalis setinggi L2
- Pmblih balik dr testis mbtk plexus pampiniformis → v.testicularis
- V.testicularis kanan → v. cava inferior
- V.testicularis kiri → v.renalis kiri → v.cava inferior
- Getah bening → Nnll.aortici lateralis & preaortik
- Persarafan: Nn.thoracales 10 & 11 lewat plexus aorticorenalis

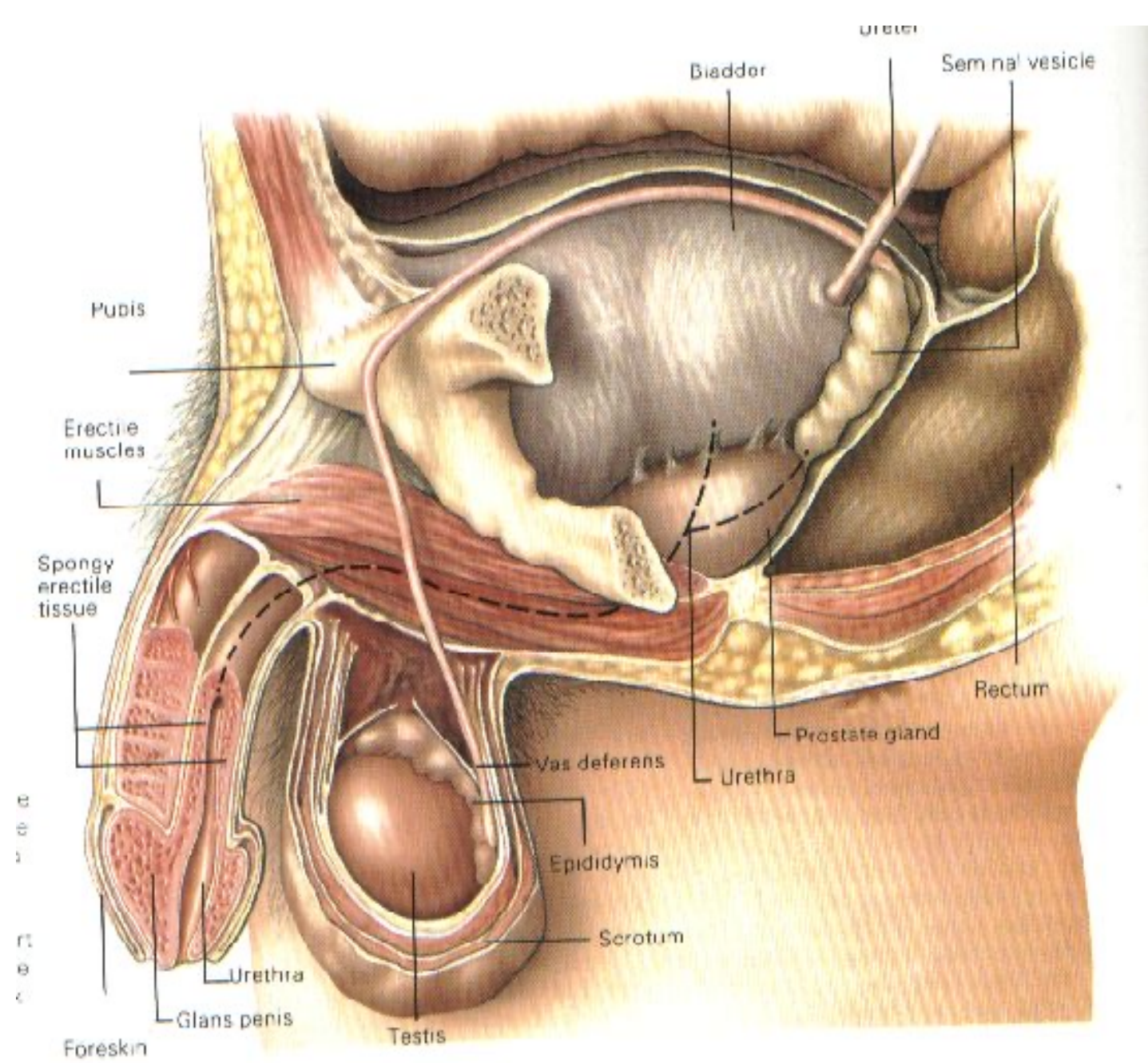
Ductulus efferens

- Kutub atas mediastinum
- 12-20 ductulus efferentes
- Tembus tunica albuginea → epididymis
- Lurus lebar → berkelok2 mbtk lobulus epididymis dlm caput epididymis



Ductus (vas) deferens

- Anulus inguinalis interna (prof), tinggalkan funic sperm melengkung lat a.epigastrica inf & ant a.iliaca ext
- Caudal & dorsal silang a.v.iliaca externa → pelvis minor, antara peritoneum & ddg lat pelvis
- Silang medial ureter
- Melintas antara basis vesicae & rectum



Ductus (vas) deferens

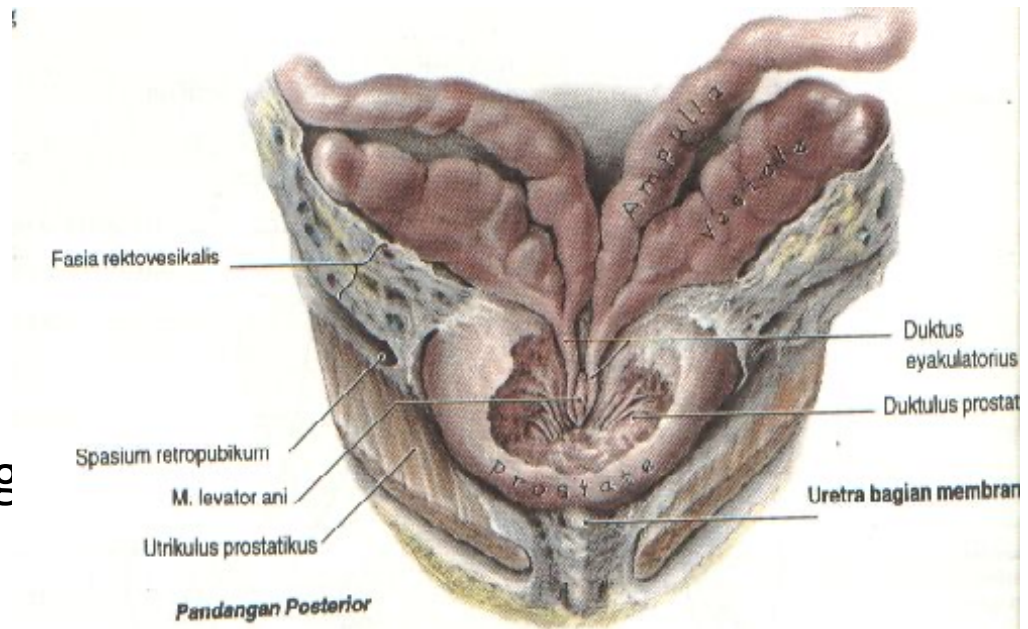
- Medial gl.vesiculosa, melebar & b'kelok: ampulla ductus deferens
- Turun ke caudal dekati sisi kontralateralnya
- Basis gl.prostata, gabung dg ductus vesica seminalis → ductus ejaculatorius

Pendarahan:

- A.deferentialis (cab a.vesicalis sup/inf)
- Anastomosis dg a.testicularis → jg mendarahi epididymis & testis

Glandula vesiculosa (vesica seminalis)

- 2 gelembung, lobus2
- Pj $\pm$ 5 cm
- Letak: dorsal vesica urinaria
- Medial tiap gelembung: ampula ductus deferens
- Dorsal: rectum
- Caudal: mengecil, gabung dg ductus deferens ipsilateral
→ duct. ejaculatorius

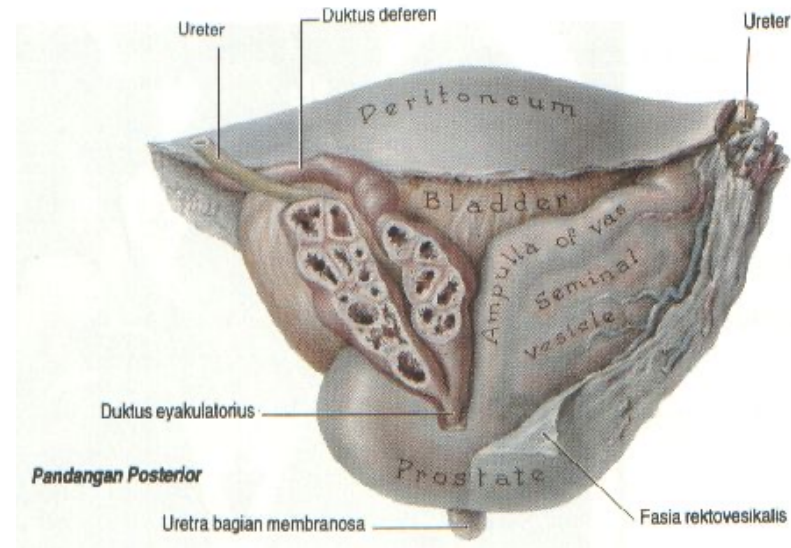


Glandula vesiculosa (vesica seminalis)

- f/: produksi sekret u/ tambah cairan semen, bahan2 esensial nutrisi sperma
 - Ejakulasi: kontraksi dinding dorong isi → duct. Ejaculatorius
-
- Pendarahan: a.vesicalis sup & a.rectlis media
 - Vena mengikuti arterinya
 - Getah bening → Nnll.iliaci externi & interni
 - Persarafan: plexus hypogastricus superior

Ductus ejaculatorius

- Penyatuan ductus excretorius gl.vesiculosa dg ductus deferens
- Pj $\pm$ 2cm
- Masuk dr batas post gl.prostata



Funiculus spermaticus

- Testis turun ddg abd → scrotum, m'bawa pembuluh2, saraf & duct deferens
- Struktur2 tsb bertemu pd anulus inguinalis prof → funiculus spermaticus
- Menggantung testis pd scrotum
- Anulus inguinalis prof – aspek posterior testis

Funiculus spermaticus

- N.ilioinguinalis: inferior funic sperm
- Canalis inguinalis, funic sperm, penutup2 dr lap ddg abd → sd scrotum
- Fascia spermatica interna (tunica vaginlis communis)
- M.cremaster
- Fascia spermatica externa

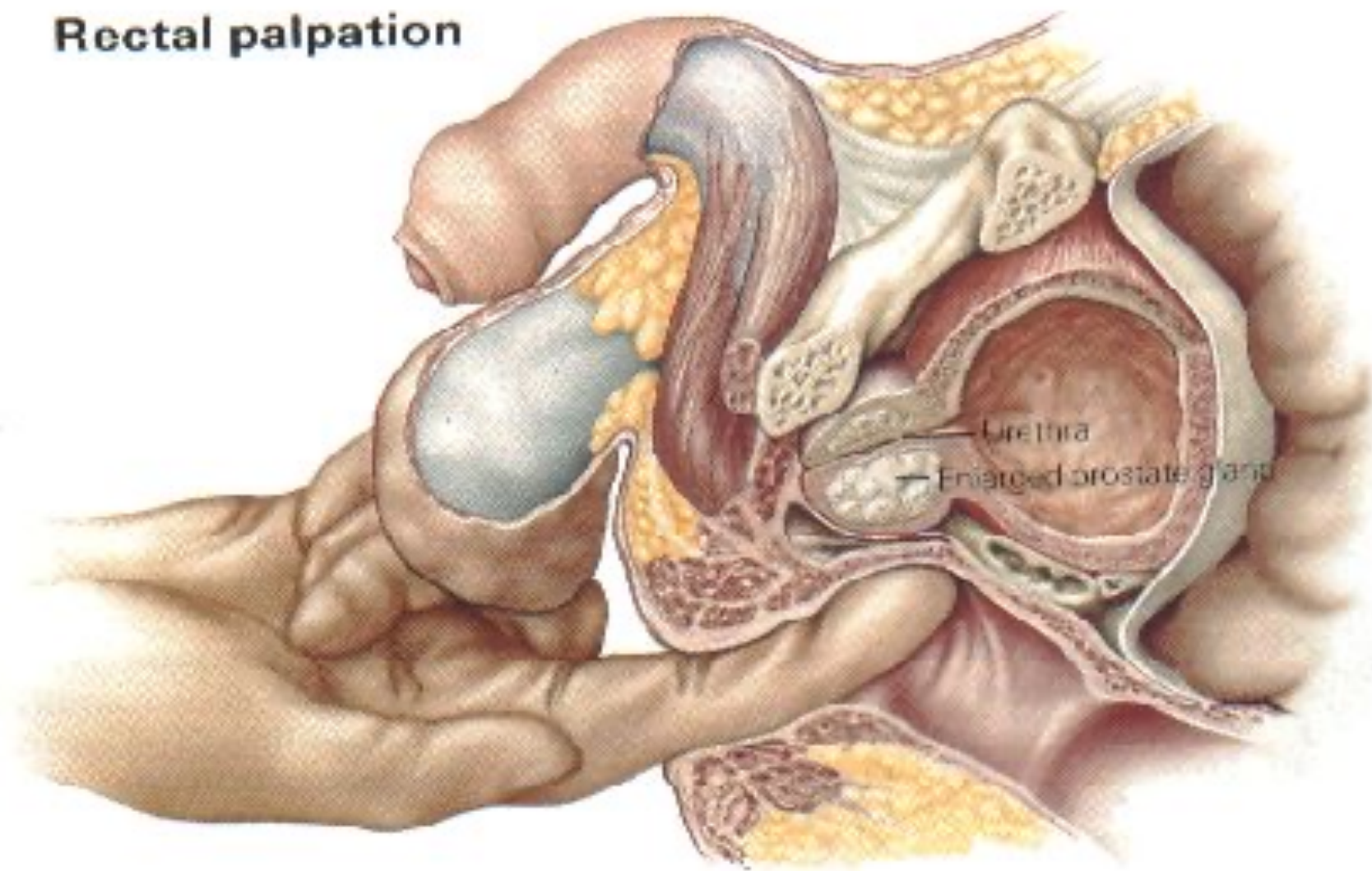
Funiculus spermaticus

- A.v.testicularis
- A.cremasterica (cab a.epigastrica inf)
- A.deferentialis (cab a.vesicalis sup/inf)
- Pembuluh limf
- R.genitalis n.genitofemoralis
- N.cremasterica (cab r.genitalis n.genitofemoralis)
- Plexus symphalicus testis yg b'gabung dg plexus hypogastricus inf, yg menyertai a.deferentialis
- Lig.vaginale

Glandula prostata

- Bangunan padat sekeliling pangkal urehtra
- Sbgm bsr kelenjar, sisa jar fibromuskular
- Letak: bg bwh pelvis minor, antara tepi inferior symphysis & arcus pubis – ampulla recti (raba)

Rectal palpation



Glandula prostata

- Apex, bwh, batas dg fascia diaphragmatis urogenitalis superior & badan perineal
- Dasar (basis), atas, lb 4 cm, batas dg collum vesicae
- Apex – basis: 3 cm
- Ø ant – post: 2 cm
- Ductus ejaculatorius → bg atas permukaan post gl.prostata → urethra pars prostatica, lat orificium utriculus prostaticus

Glandula prostata

Permukaan2:

- Anterior: -plexus venosus prostaticus & jar lemak- dorsal symphysis pubis
- Posterior: -fascia rectovesicalis (avascular)- rectum
- 2 inferolateral: -plexus venosus prostaticus- batas dg bg anterior m.levator ani dg penutupnya (fascia diaphragmatis pelvis superior)

Glandula prostata

5 lobus:

- L.anterior: ventral urethra pars prostatica, ≠ kelenjar
- L.medialis: antara urethra & ductus ejaculatorius, kelenjar
- L.posterior: post urethra, caudal ductus ejaculatorius, kelenjar
- L.lateralis; kiri & kanan urethra, kelenjar

Glandula prostata

- f/: cairan encer putih, mgd fosfat & sitrat
 - Alkalis, netralisir pH cairan vagina
- Ejakulasi:
 - Kontraksi otot polos stroma
 - Sekret → urethra pars prostatica

Pendarahan

Cabang2 a.iliaca interna (a.hypogastrica):

- a.pudenda interna
- a.vesicalis inferior
- a.rectalis media

Glandula prostata

Vena

- Plexus venosus prostaticus (antara kapsul & fascia pelvis)
 - Dari v.dorsalis penis (profunda)
- → v.iliaca interna
- Anastomosis plexus venosus prostaticus & plexus venosus rectalis (hemorrhoidalis) & plexus venosus extradural → mgkn penyebaran keganasan prostat → corpora vertebrae

Getah bening

- → nnll. iliaci interni; nnll. sacralis
- → nnll. iliaci externi

Kelenjar bulbourethralis

- Letak: lateral urethra pars membranosa, dlm kantong perinealis profundus (cranial membrana perinealis & bulbus penis)
- Terbungkus serabut2 m.sphincter urethrae
- Sal keluar tembus membrana perinealis → urethra pars spongiosa, 2,5 cm caudal membrana perinealis

Urethra

Male

