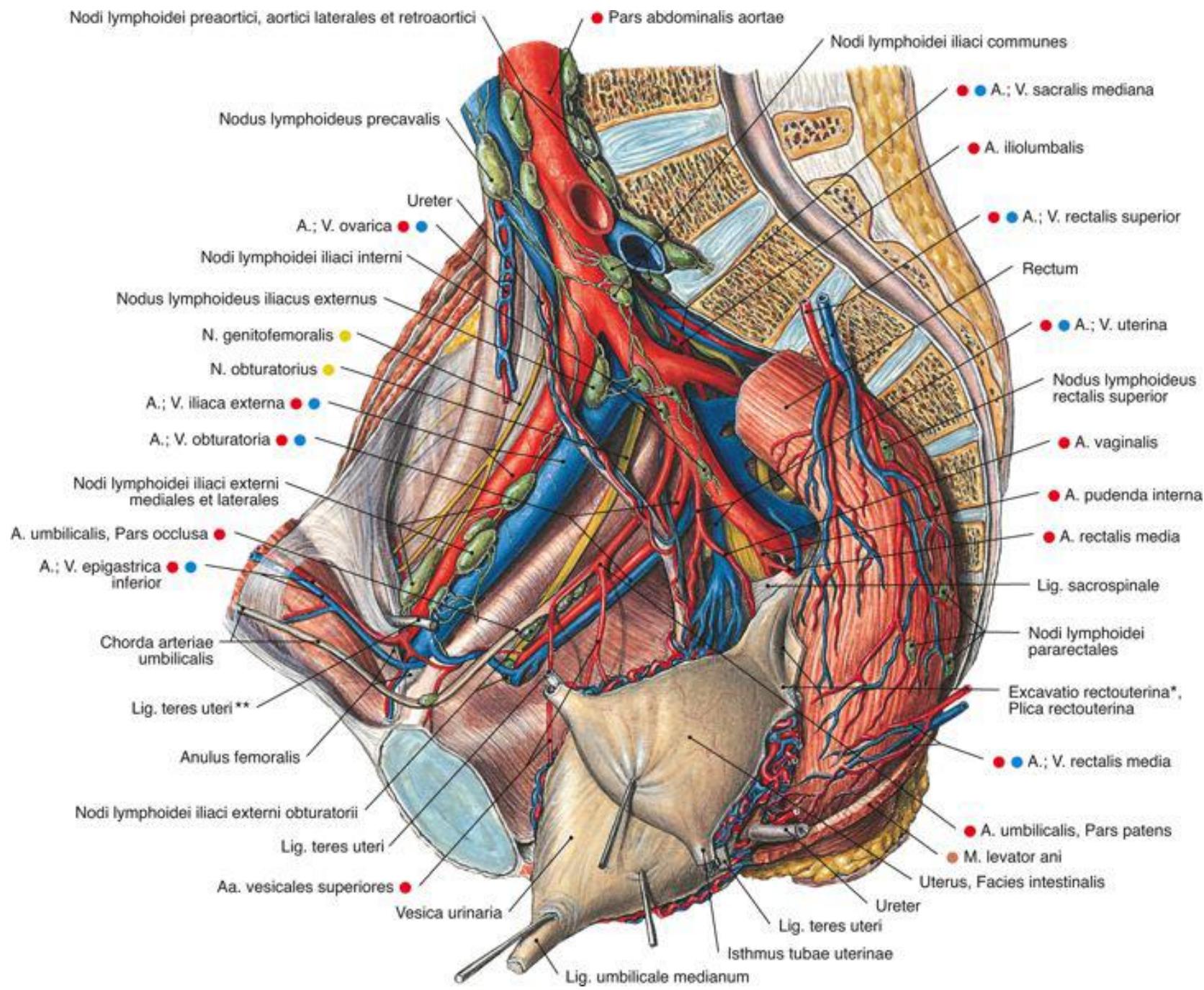


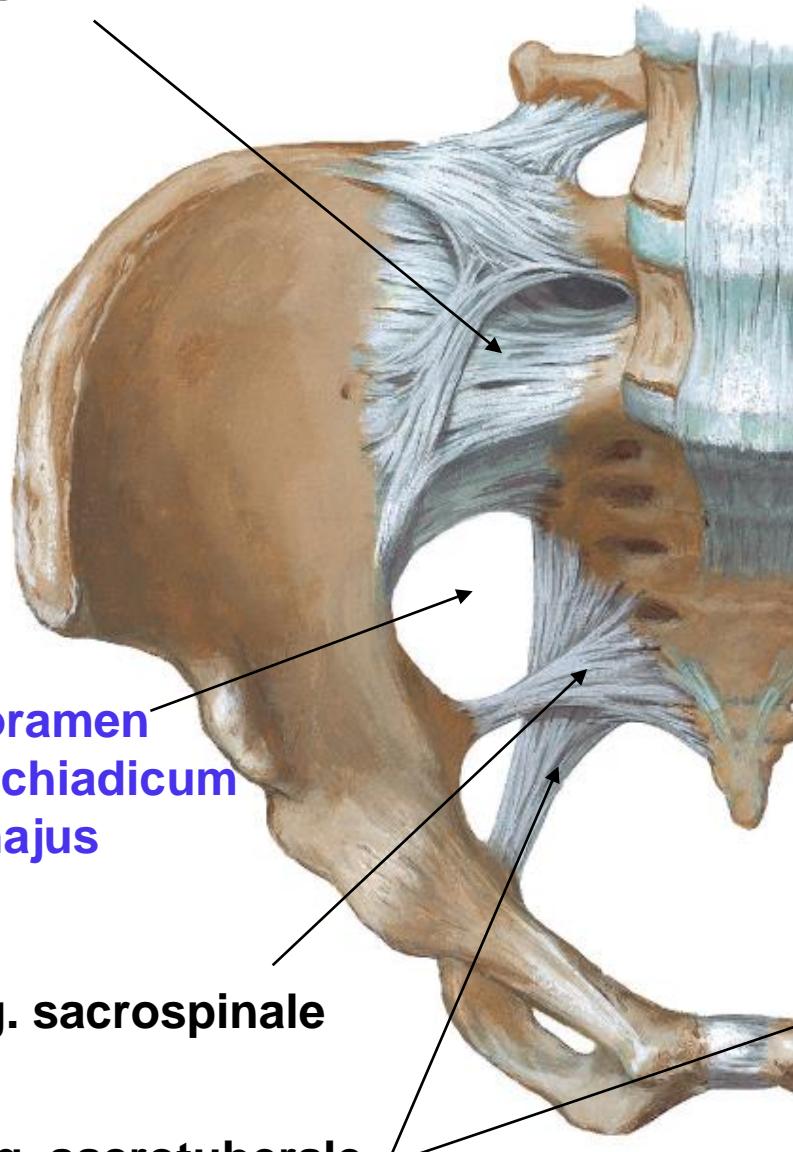
Topografie pánve

David Kachlík

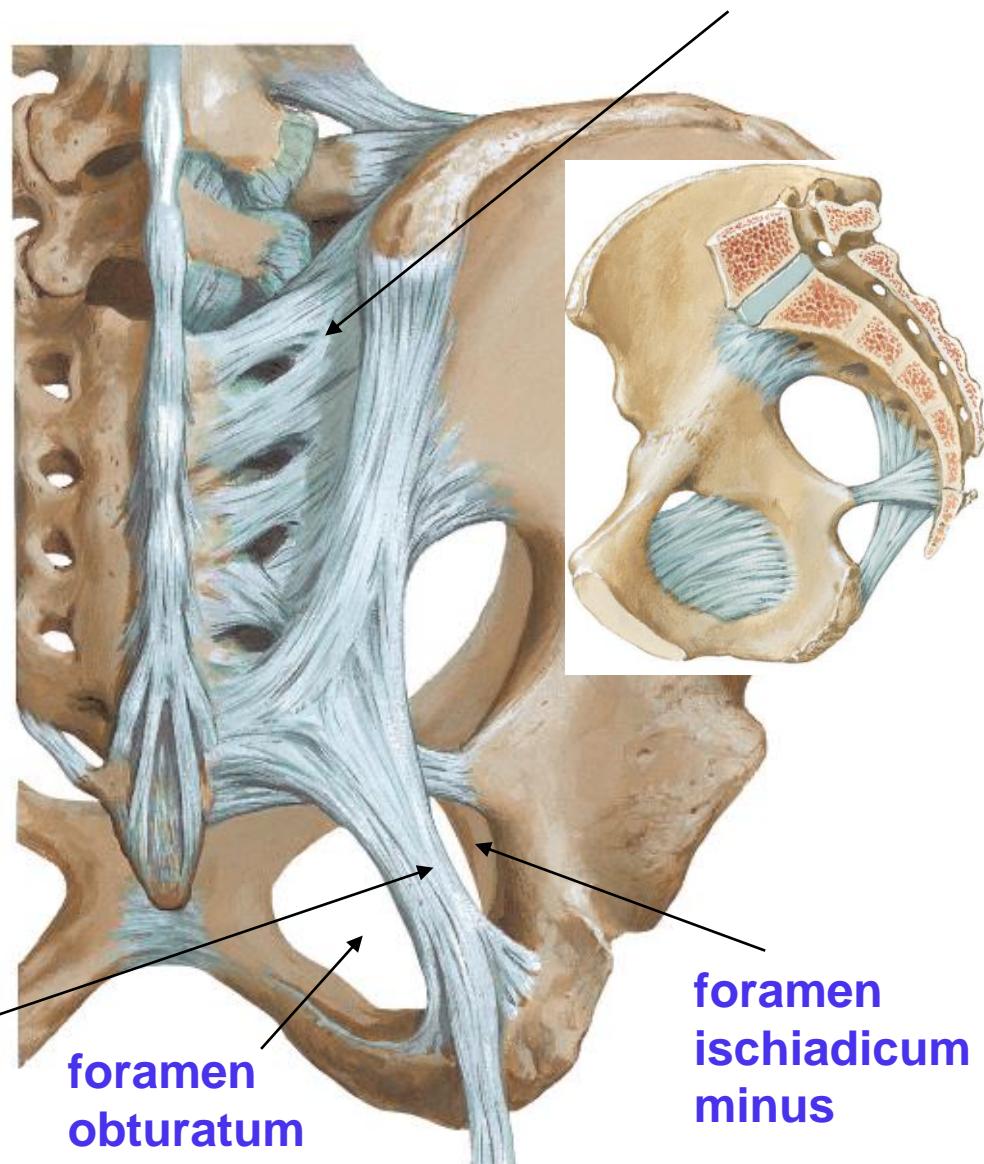


Vazy

lig. sacroiliacum anterius



lig. sacroiliacum posterius



**foramen
ischiadicum
majus**

lig. sacrospinale

lig. sacrotuberale

**foramen
obturatum**

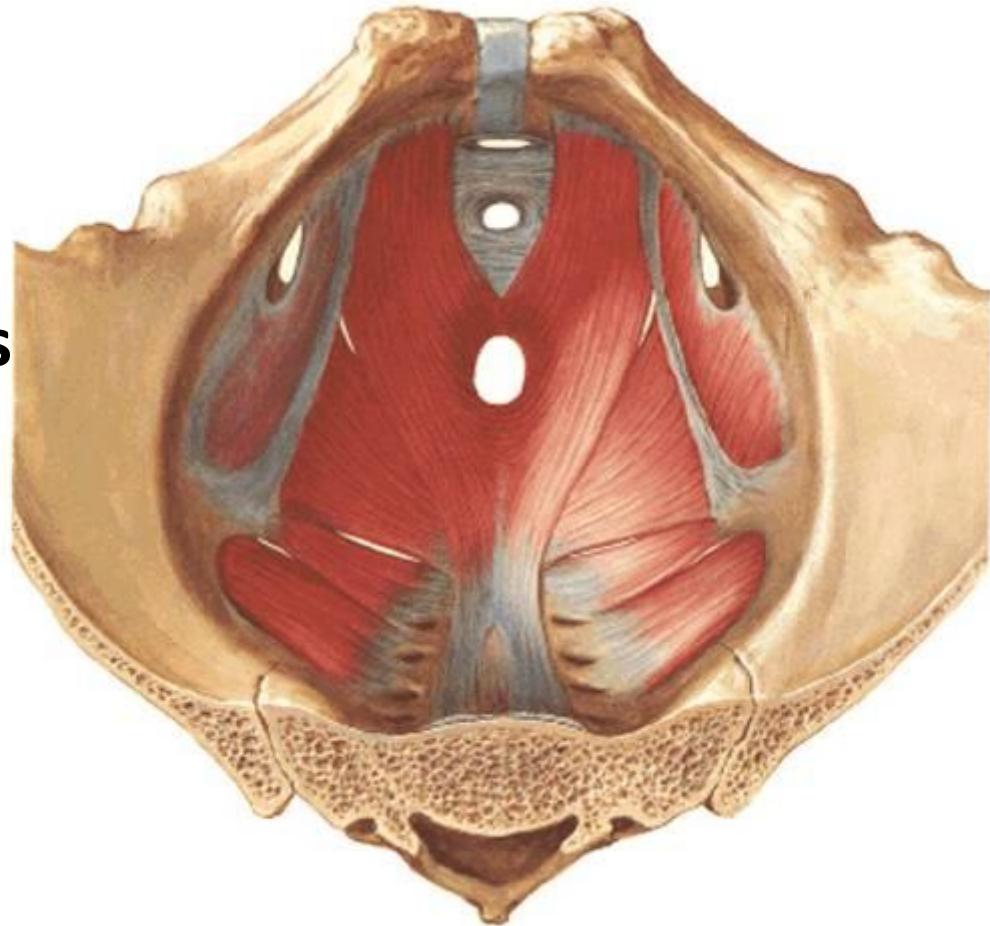
**foramen
ischiadicum
minus**

Svaly pánevního dna

- m. levator ani
- m. ischioccocygeus
- m. sphincter ani externus

inervace:

n. pudendus
(ventrolaterální část)
r. anterior n. sacralis S4



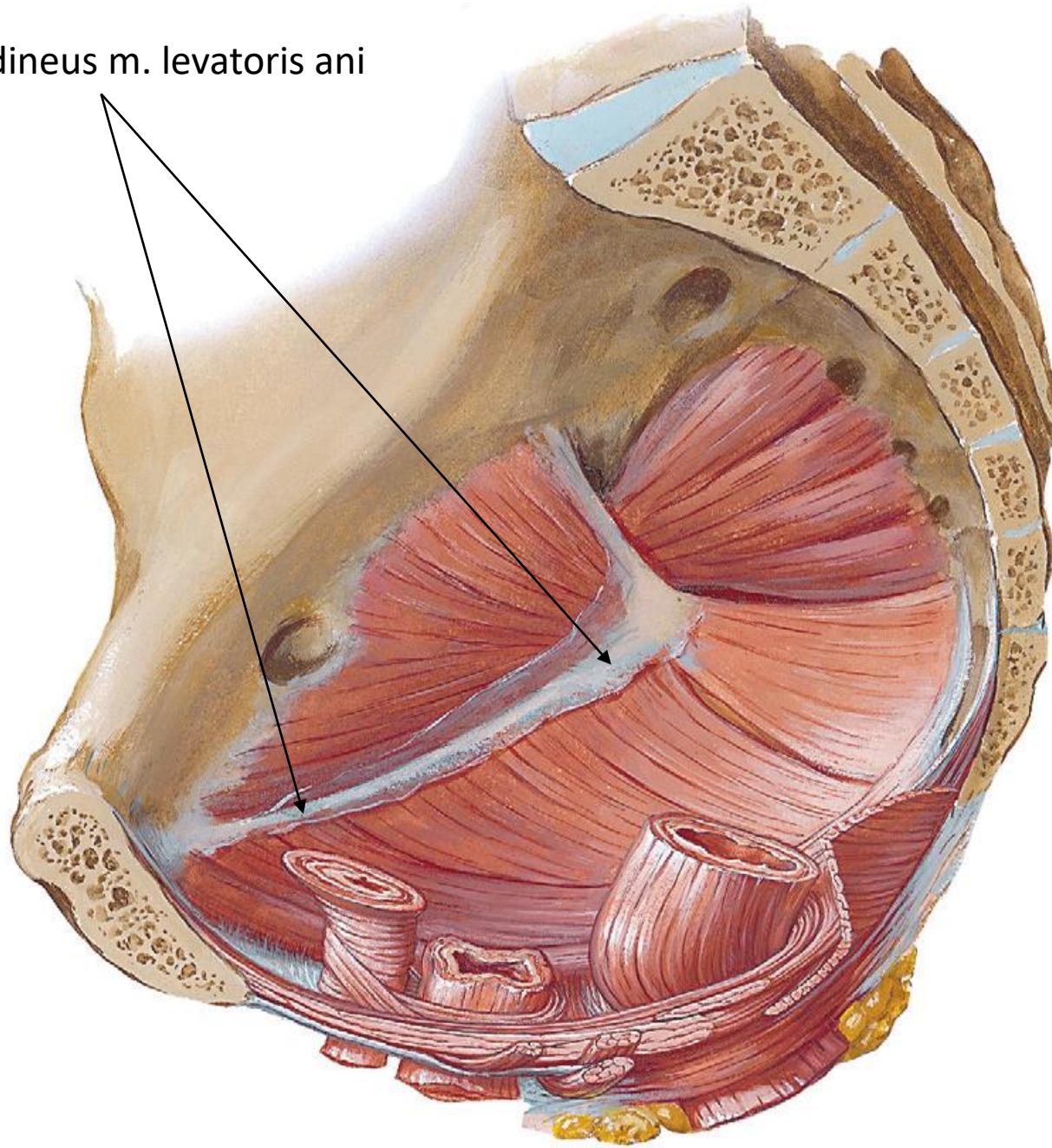
Svaly pánevního dna

M. ischiococcygeus (coccygeus)

- souběžně a navnitř od lig. sacrospinale



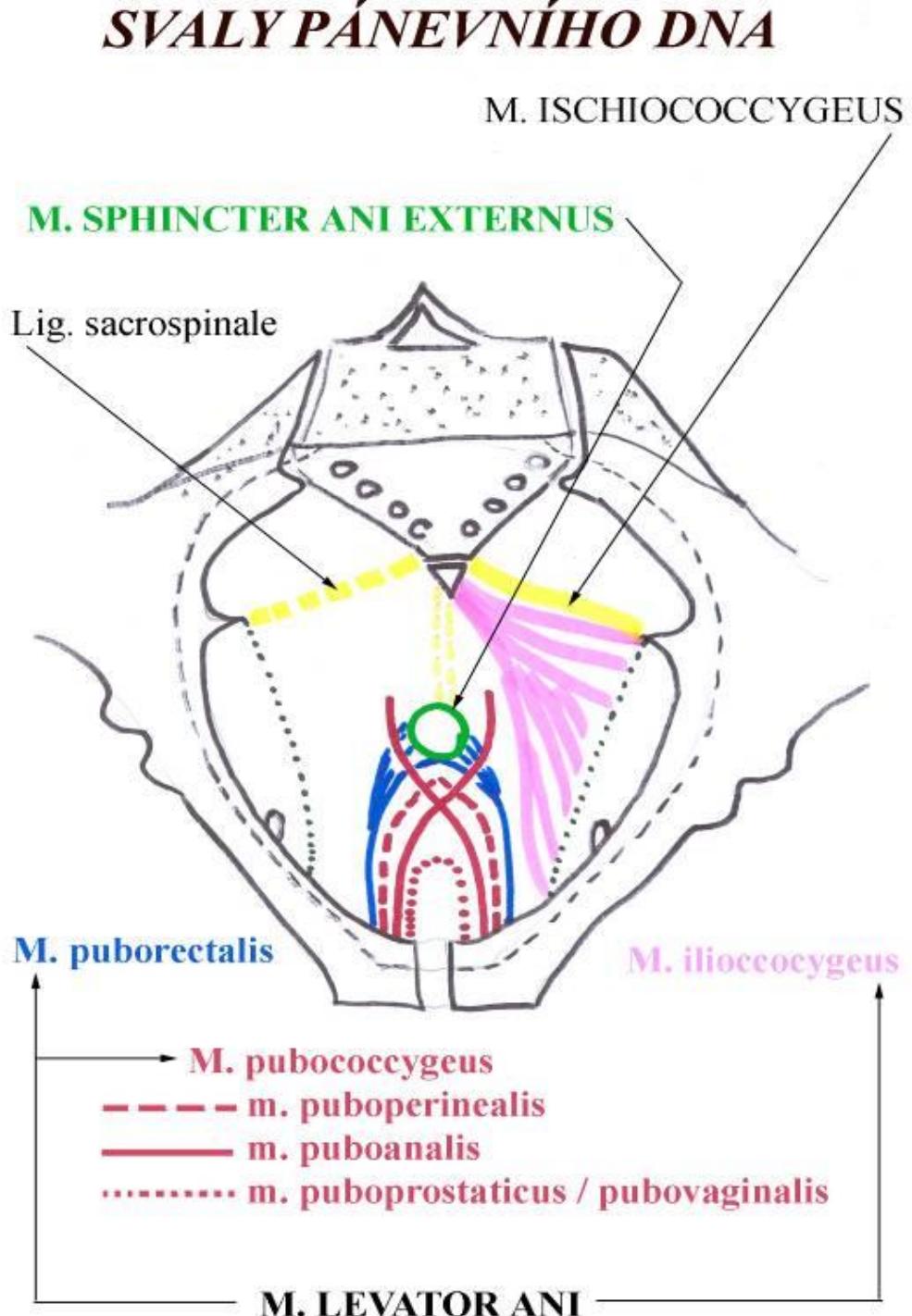
arcus tendineus m. levatoris ani



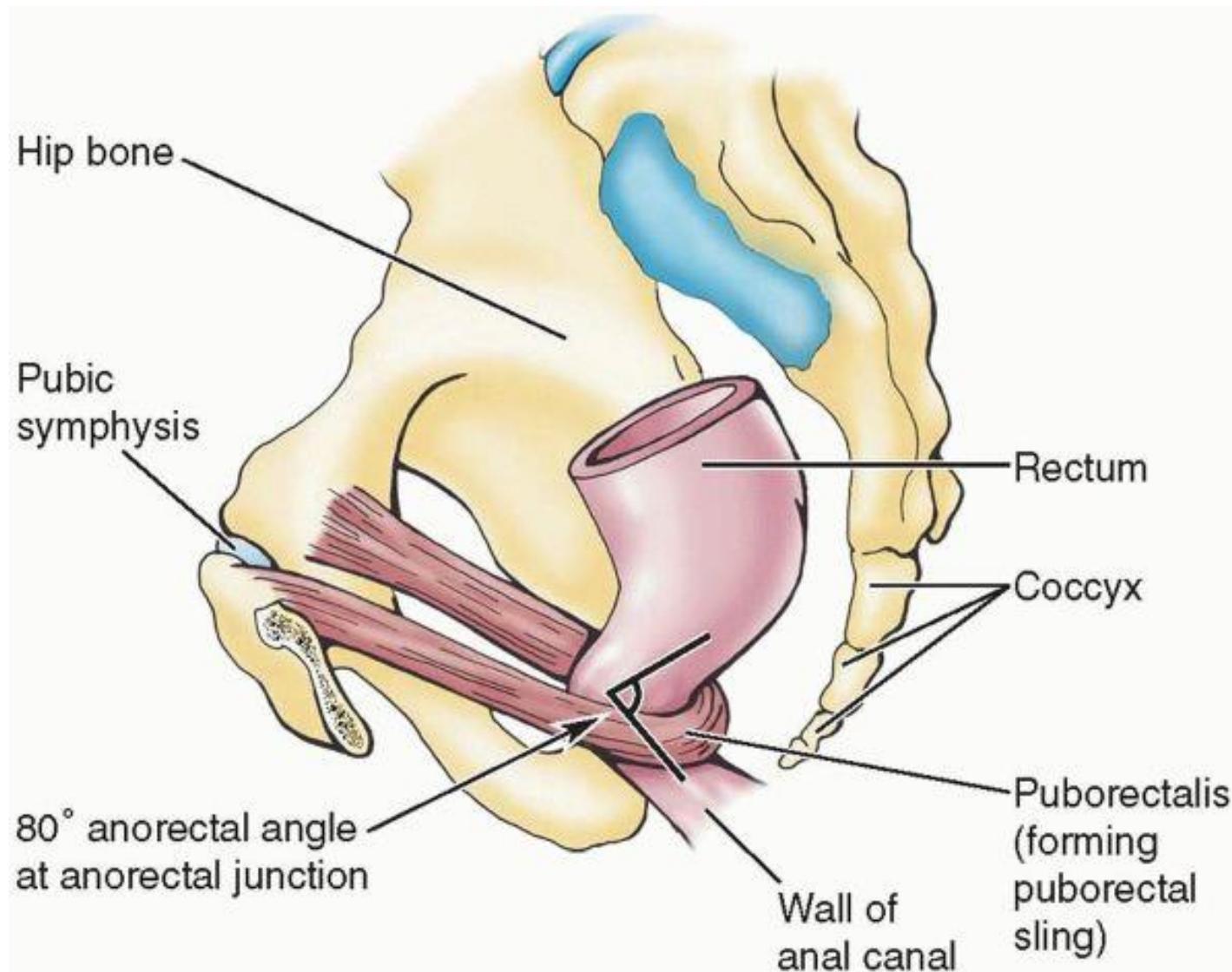
SVALY PÁNEVNÍHO DÍLO

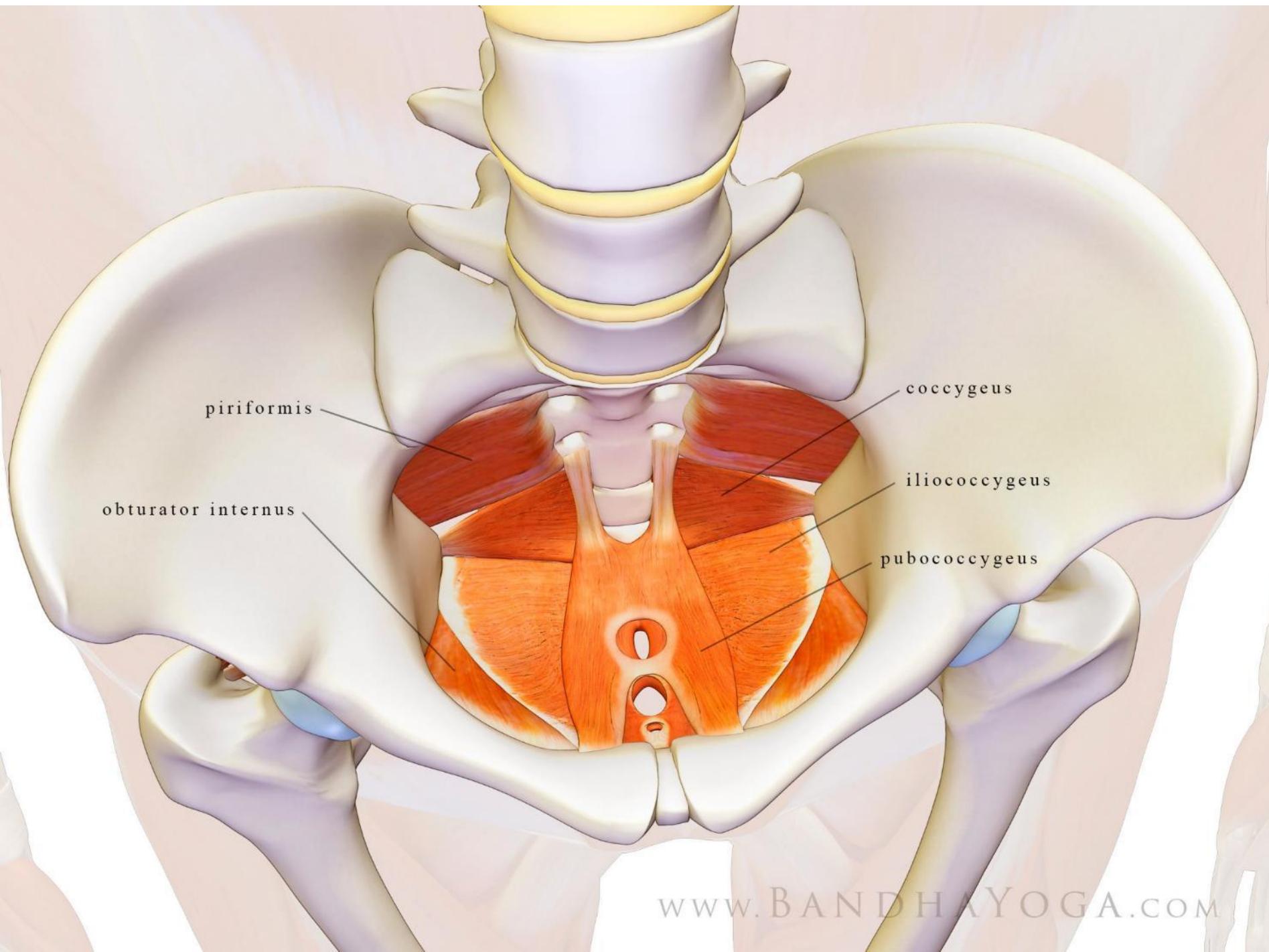
Svaly pánevního díla M. levator ani

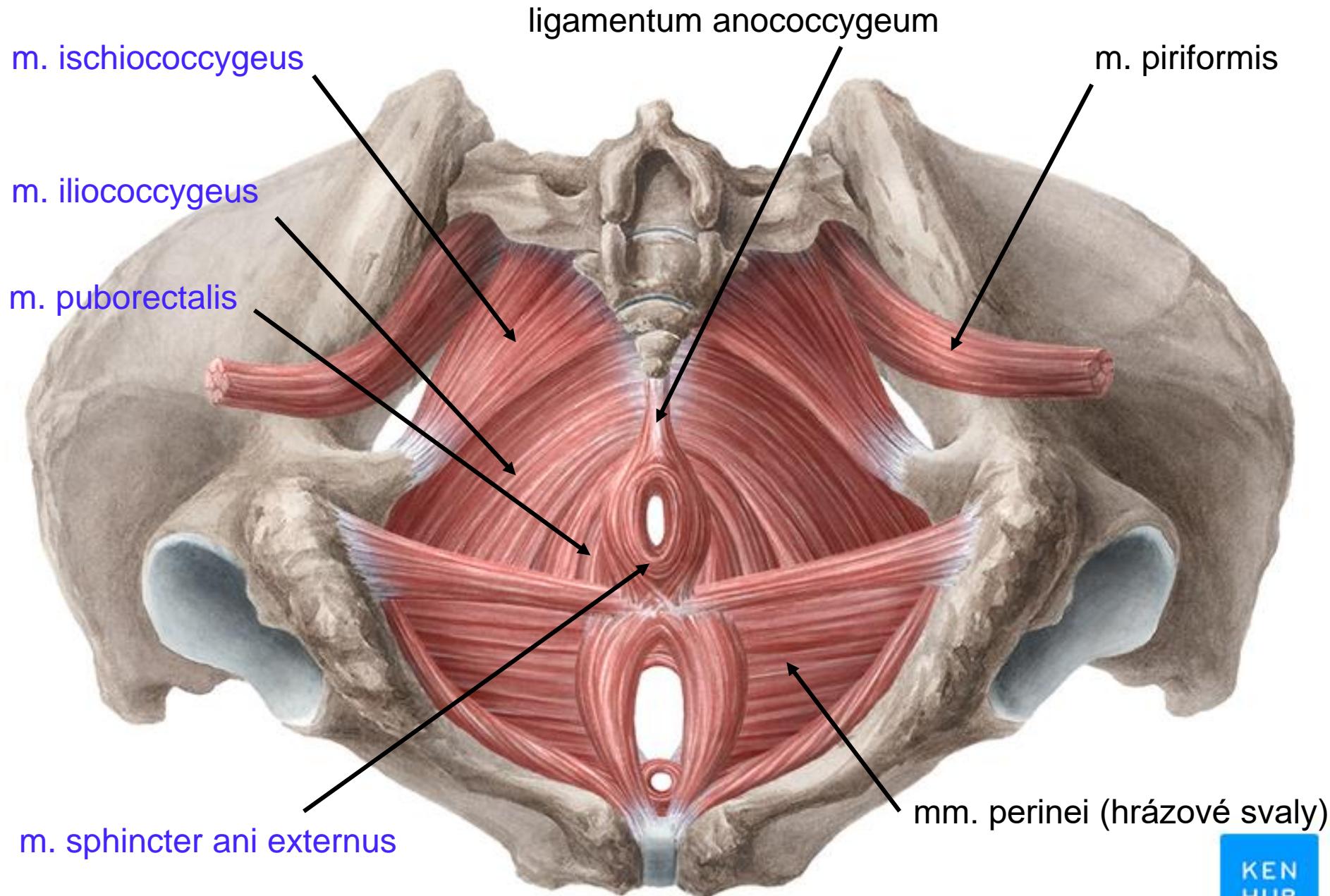
- m. puboccocygeus
 - m. puboperinealis
 - m. puboprostaticus (=m. levator prostatee)
 - u muže
 - m. pubovaginalis
 - u ženy
 - m. puboanalis
- m. puborectalis - kaudálně pod m. puboccocygeus
- m. iliococcygeus – začíná na arcus tendineus m. levatoris ani

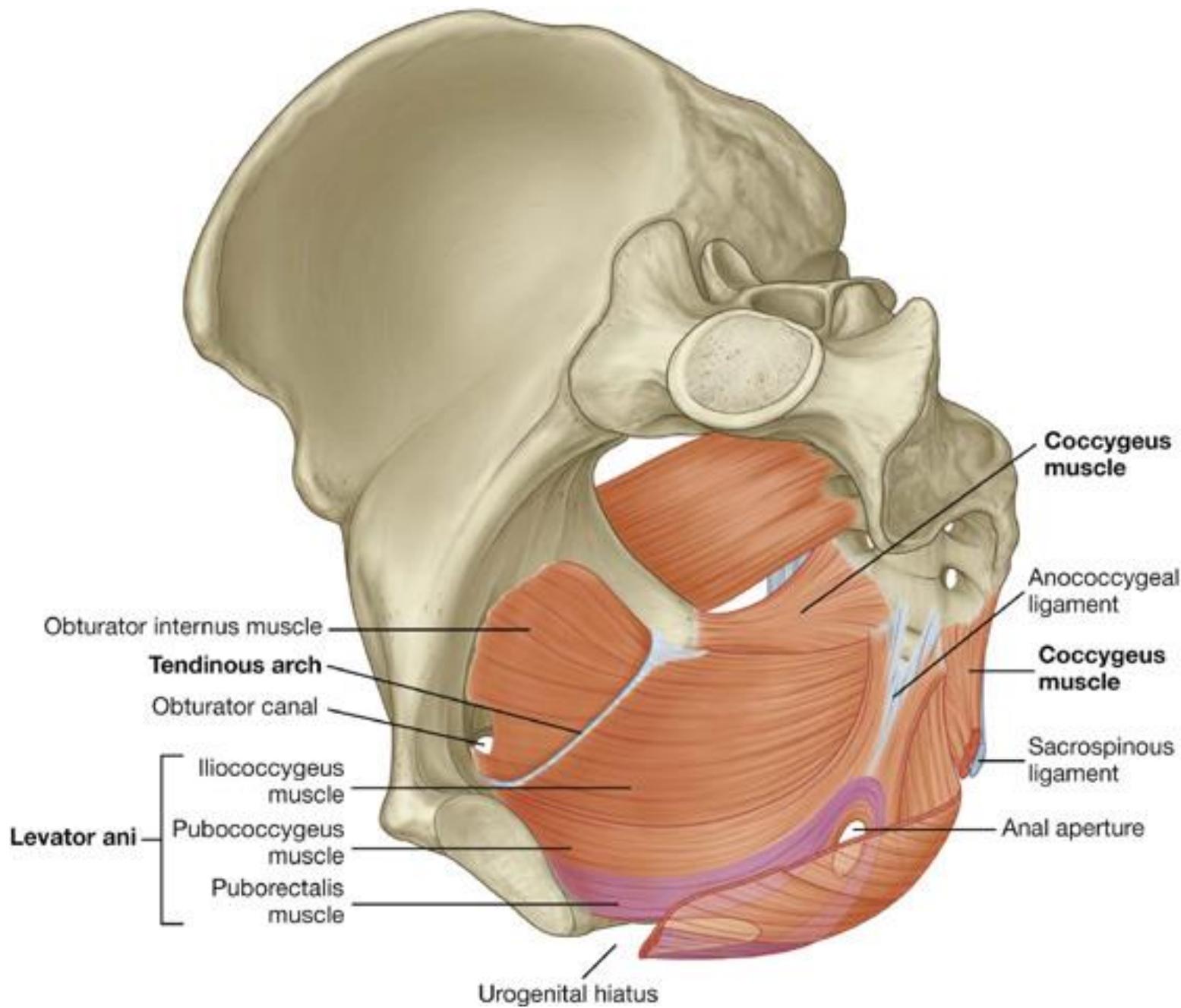


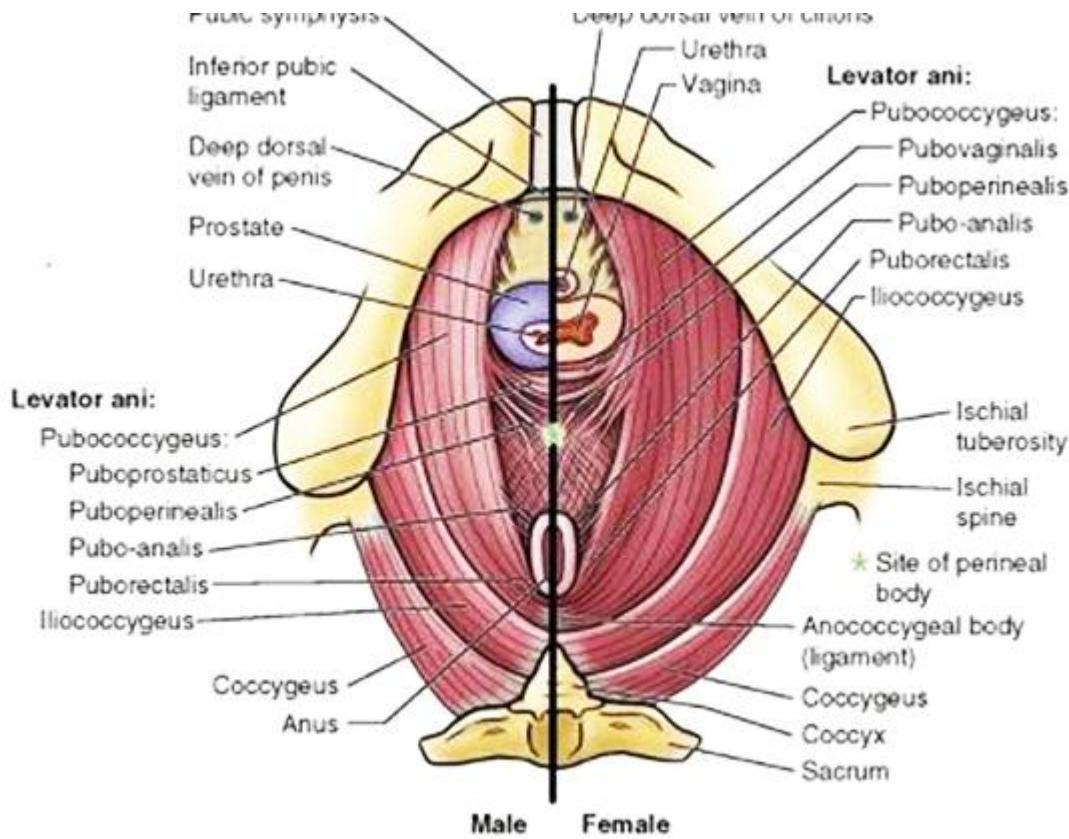
M. puborectalis











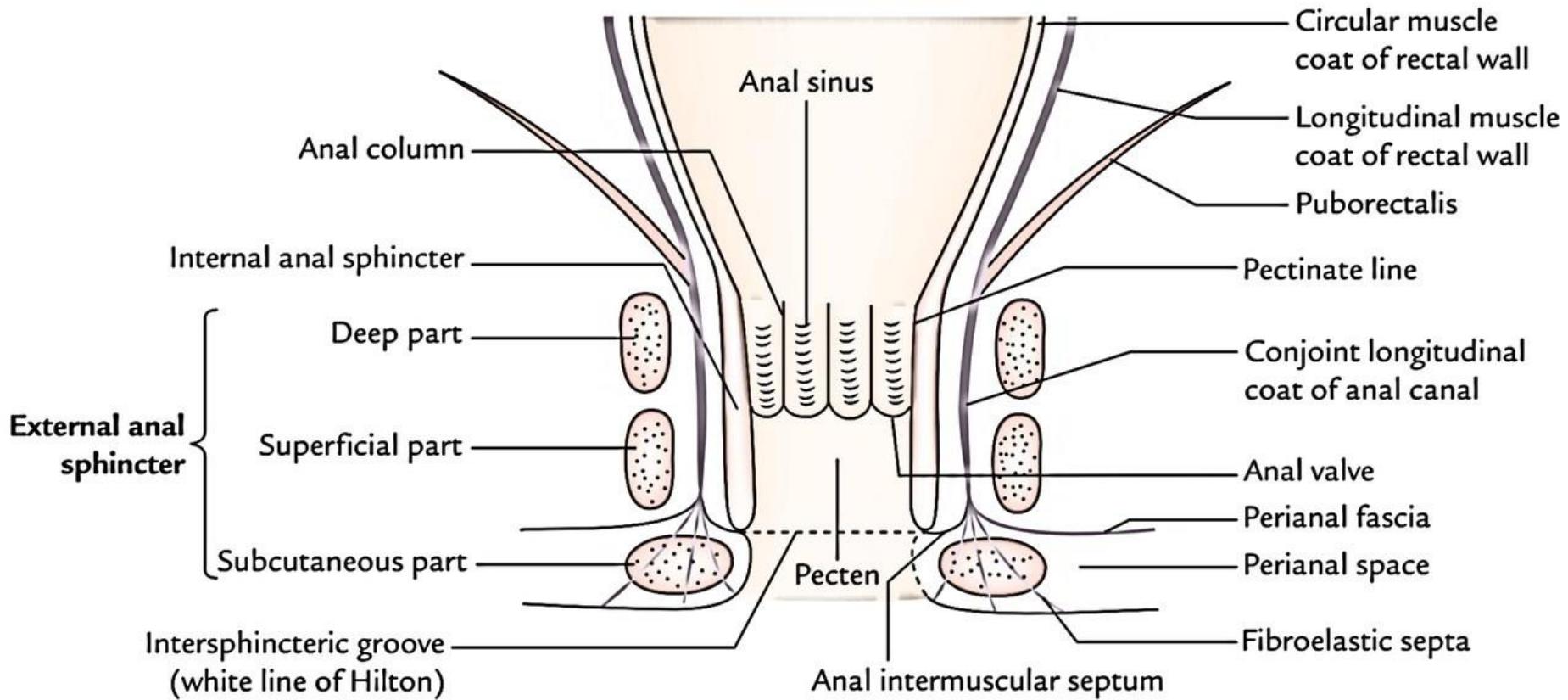
muž – m. pubococcygeus:

- m. puboprostaticus
- m. puboperinealis
- m. puboanalisis
- m. puborectalis

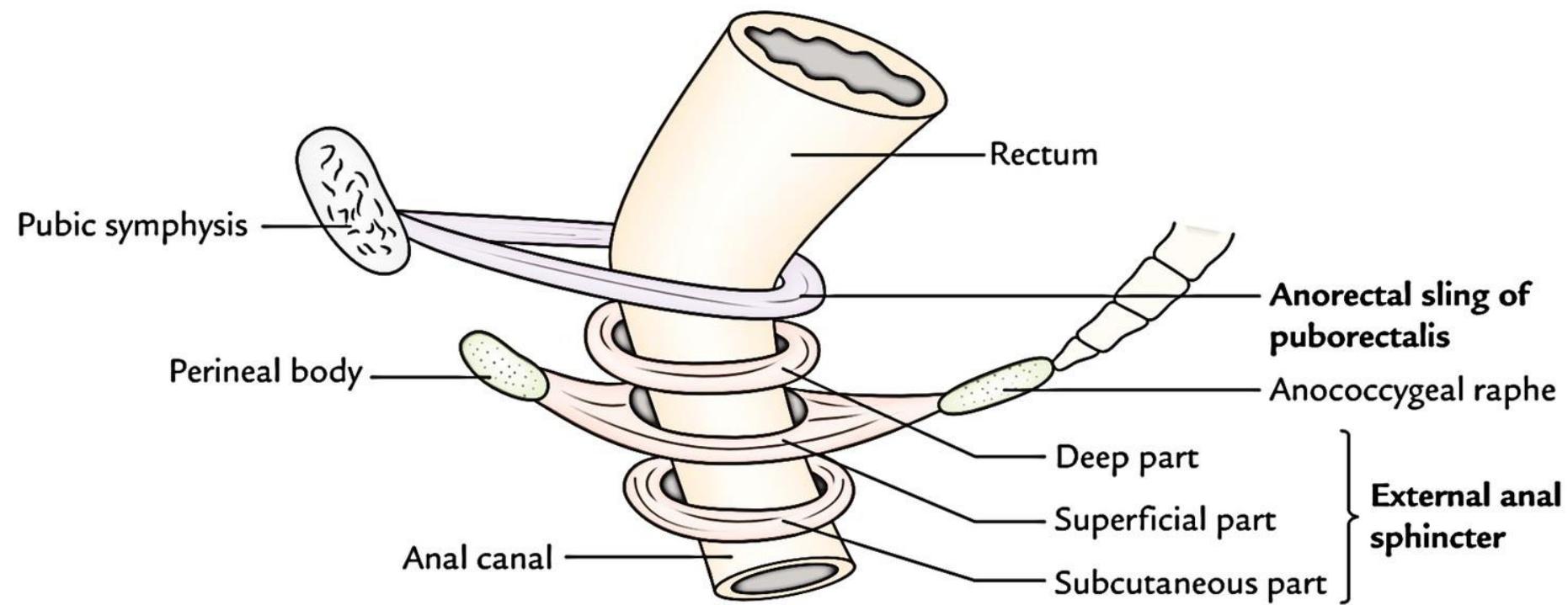
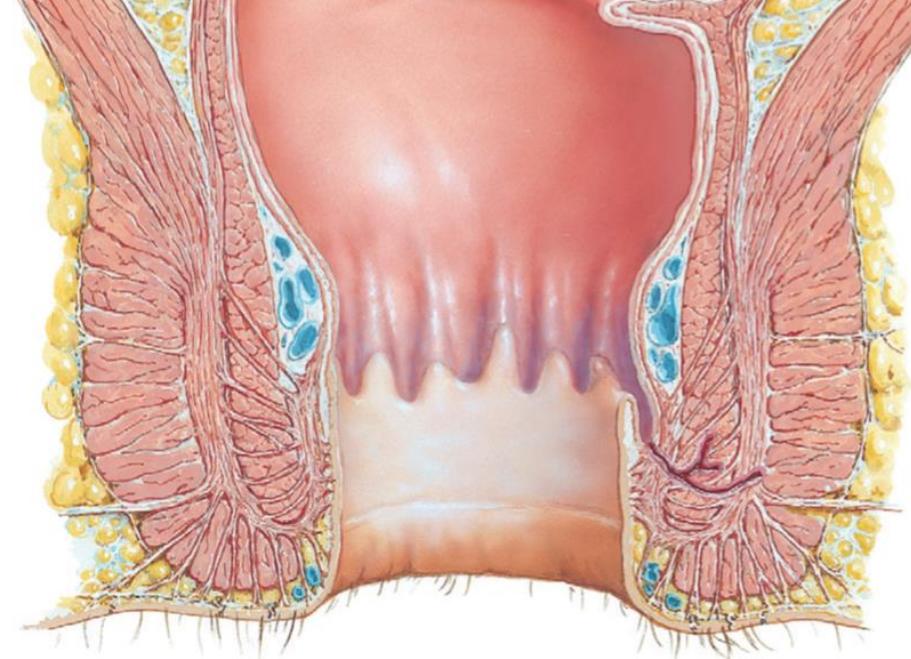
žena – m. pubococcygeus:

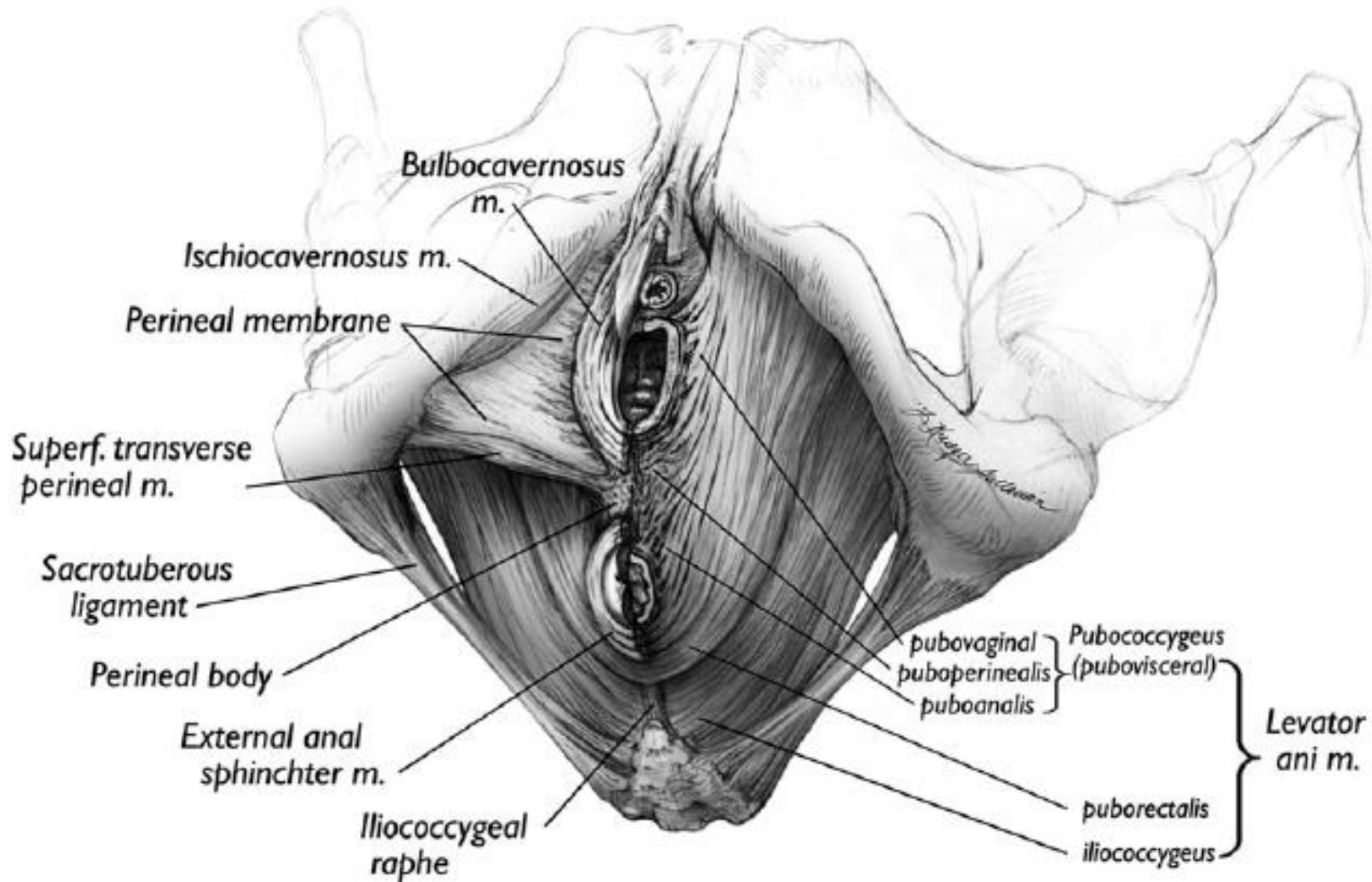
- m. pubovaginalis
- m. puboperinealis
- m. puboanalisis
- m. puborectalis

M. sphincter ani externus et internus



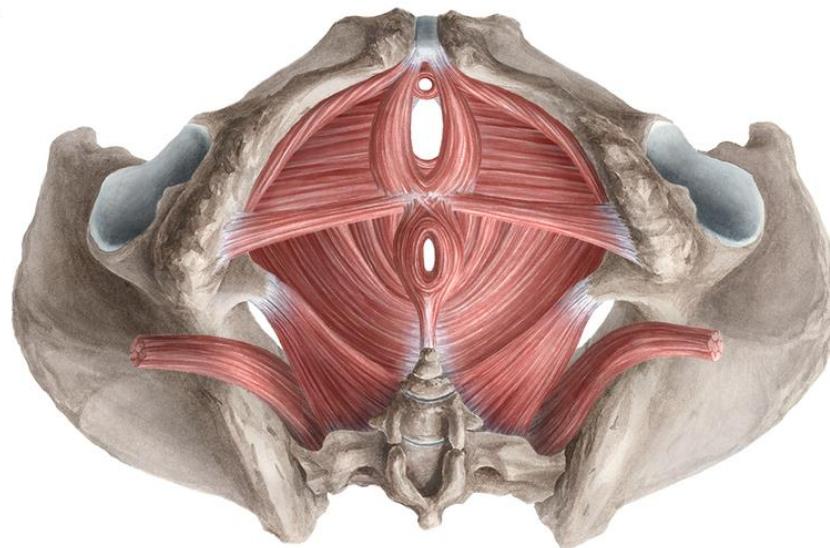
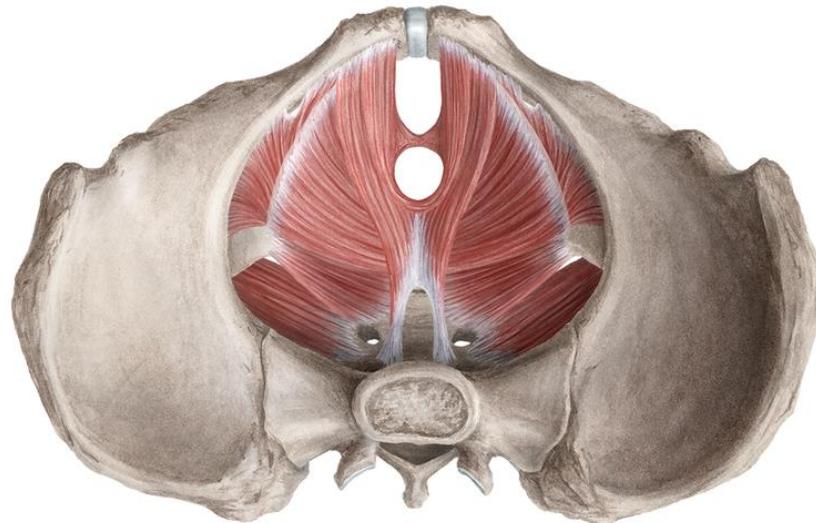
M. sphincter ani externus et internus





Diaphragma pelvis

Diaphragma urogenitale



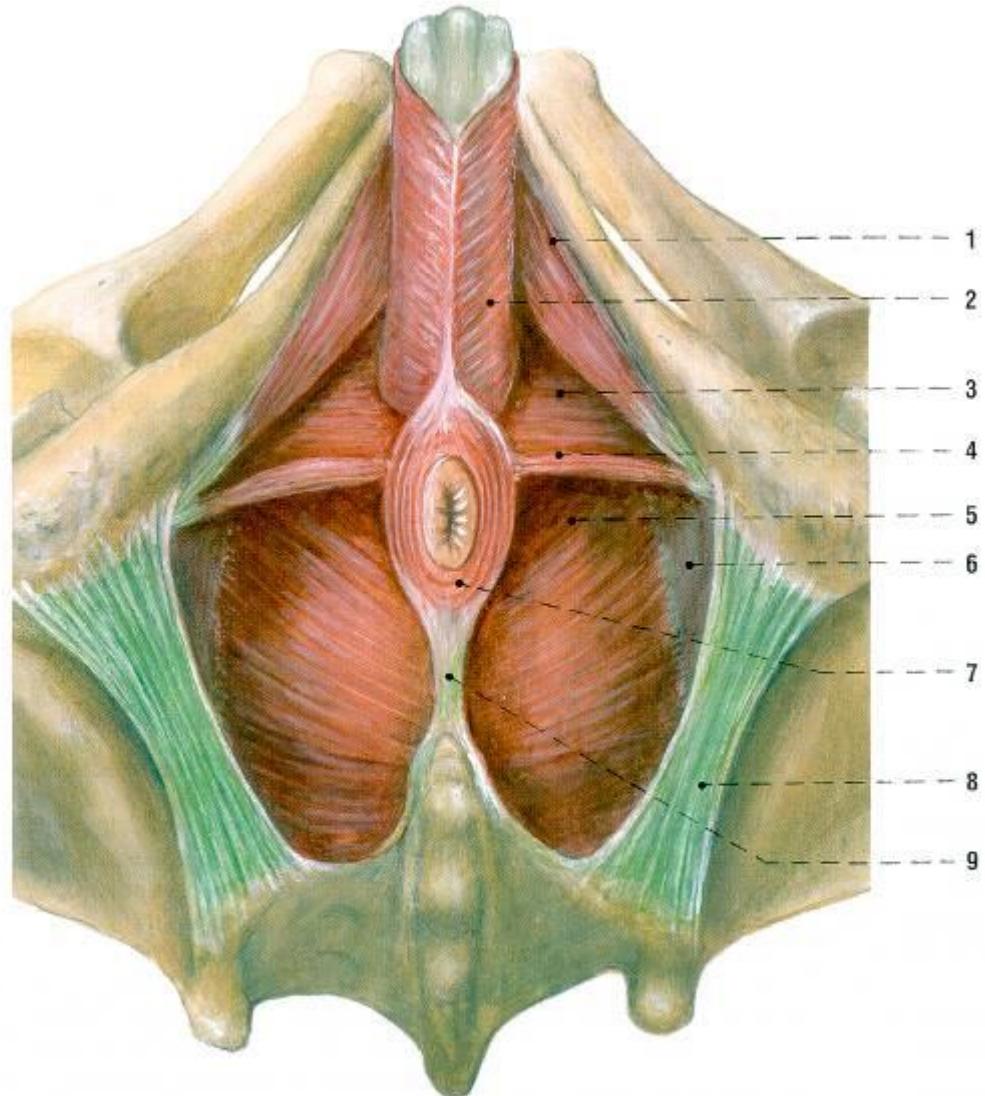
Močopohlavní dno

- = diaphragma urogenitale
- není pojmem Terminologia Anatomica 1998
- hodí se pro názornost
- svaly hráze = *musculi perinei* dle TA 1998
- 4 svaly v rovině = „dno“
- + 3 ♀ / 1 ♂ další svaly kolem močové trubice
- středem je corpus perineale
- inervace: kořen S4
 - nn. perineales n. pudendi
 - rr. anteriores nn. sacralium
 - nn. splanchnici pelvici

Svaly dna pánevního a mčopohlavního muže žabí perspektiva



- m. transversus perinei profundus
- m. transversus perinei superficialis
- m. bulbospongiosus
- m. ischiocavernosus
- m. sphincter urethrae externus



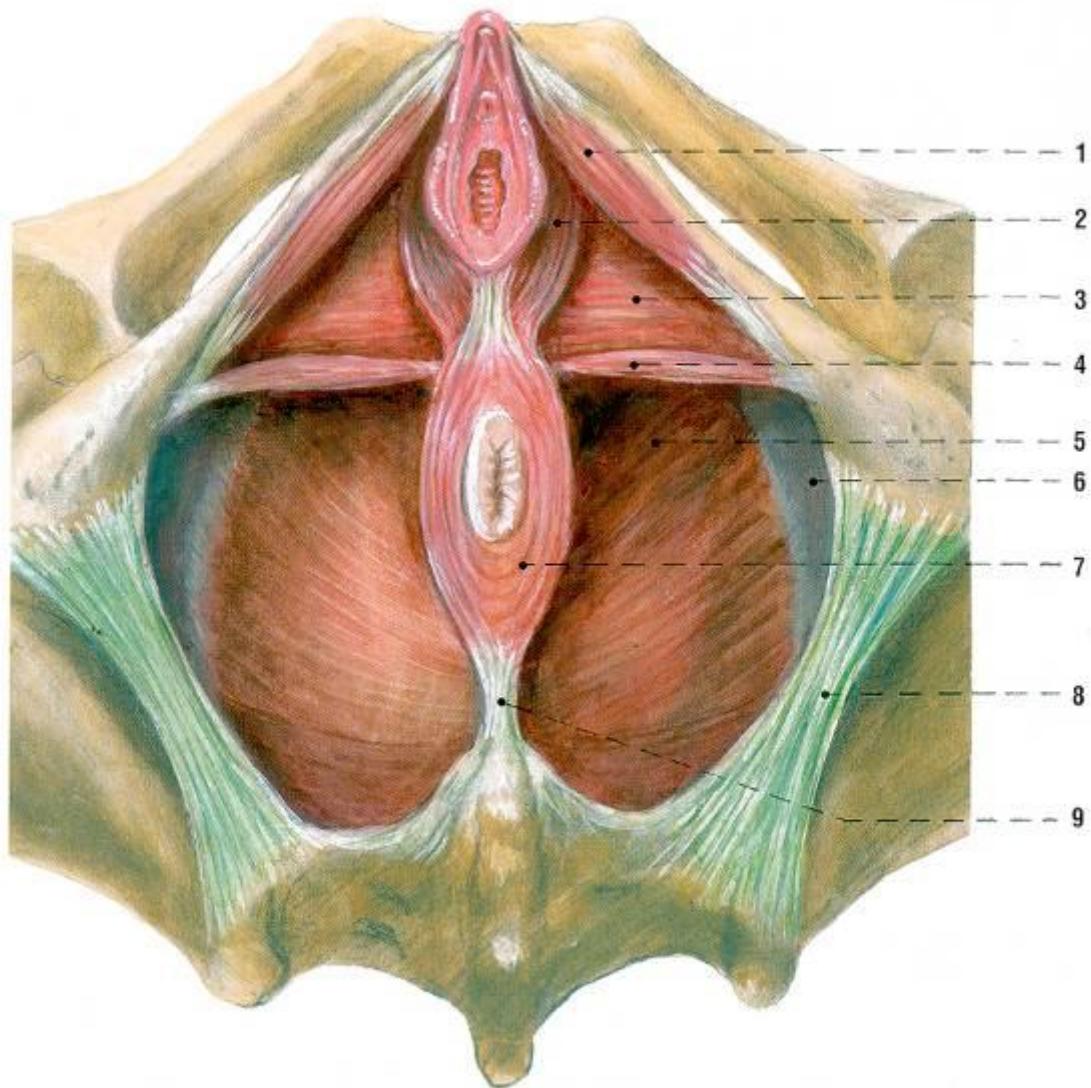
1 m. ischiocavernosus
2 m. bulbospongiosus
3 diaphragma urogenitale
4 m. transversus perinei superficialis

5 m. levator ani
6 m. obturatorius internus a jeho fascie
7 m. sphincter ani externus
8 lig. sacrotuberale
9 lig. anococcygeum

Svaly dna pánevního a močopohlavního ženy žabí perspektiva



- m. bulbospongiosus
- m. ischiocavernosus
- m. transversus perinei
superficialis



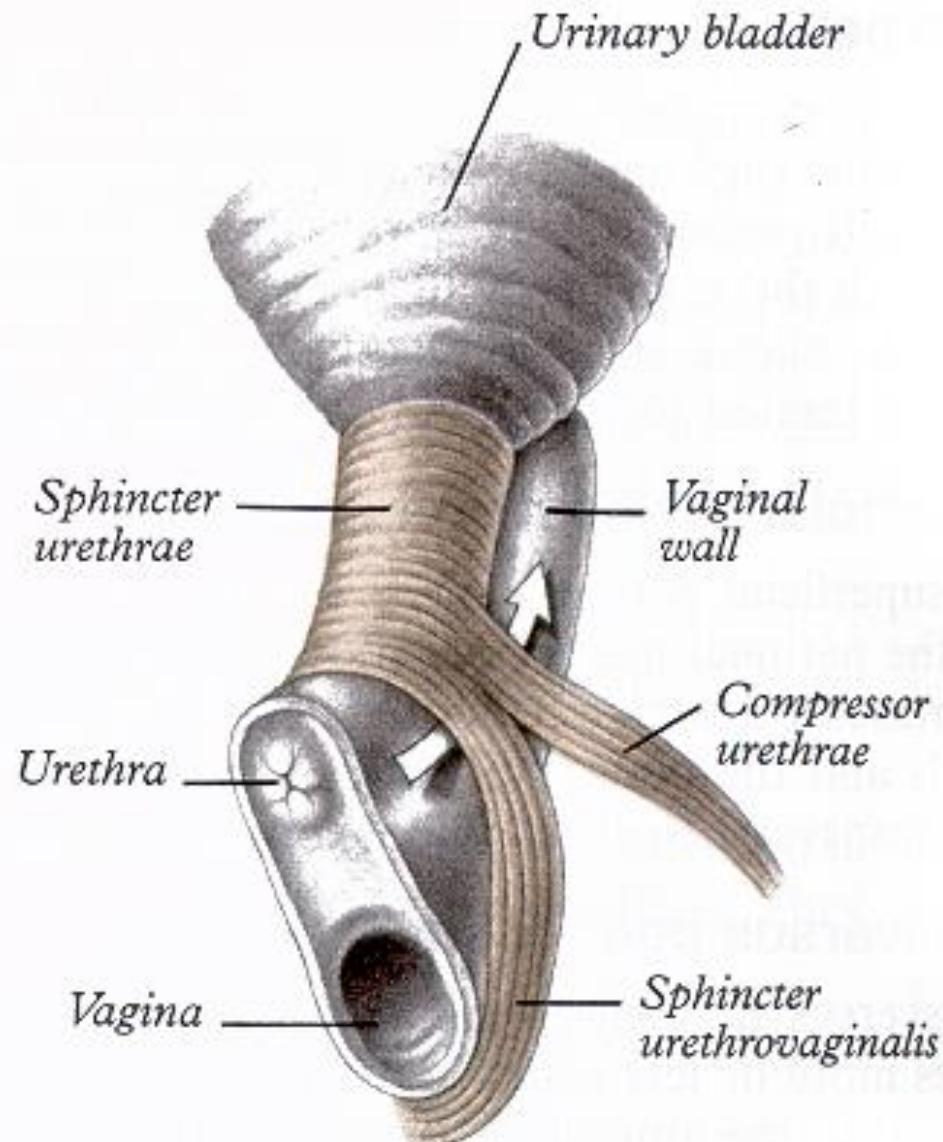
1 m. ischiocavernosus
2 m. bulbospongiosus
3 diaphragma urogenitale
4 m. transversus perinei superficialis

5 m. levator ani
6 m. obturatorius internus a jeho fascie
7 m. sphincter ani externus
8 lig. sacrotubерale
9 lig. anococcygeum

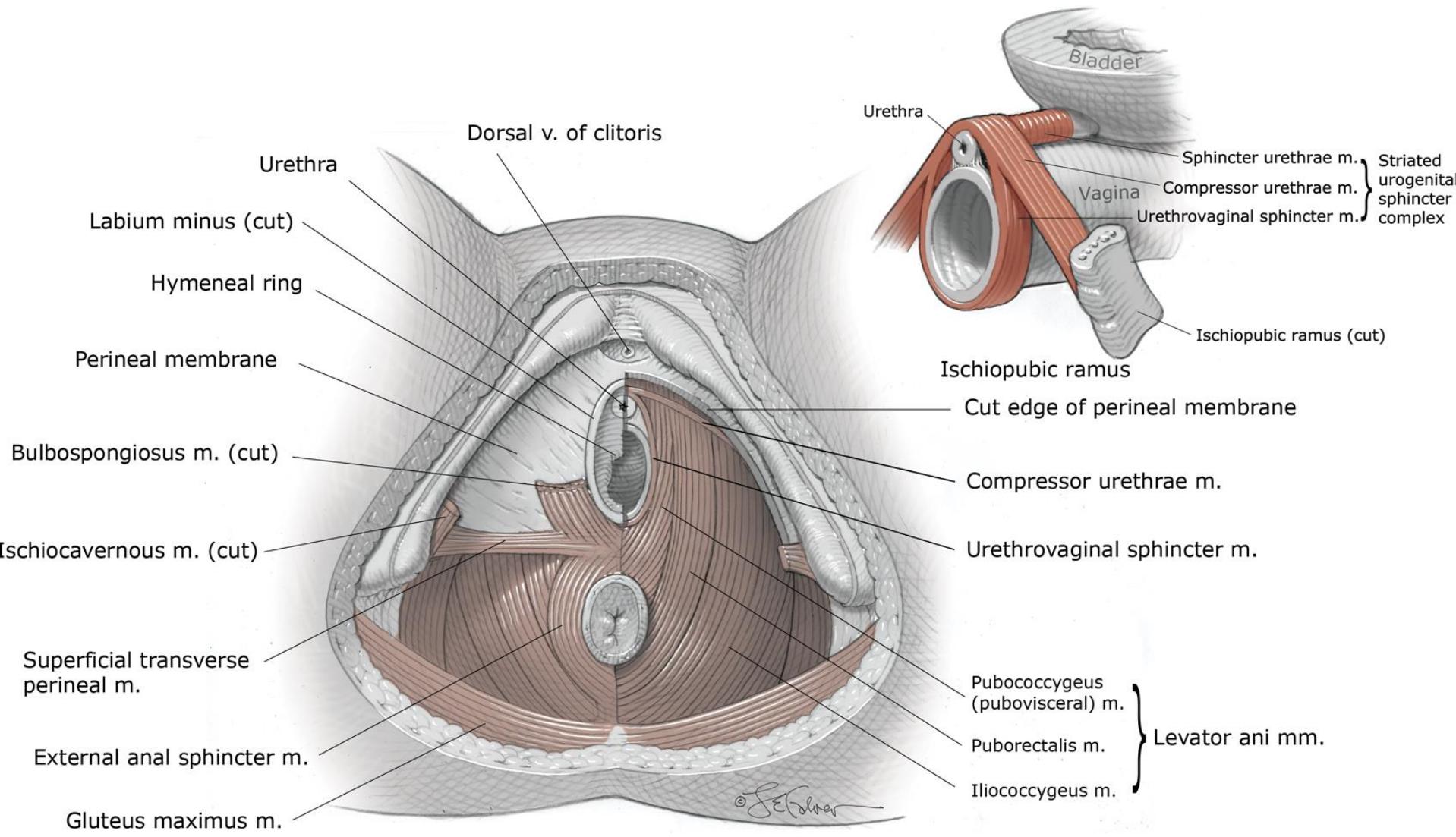
Svaly močopoavního dna ženy



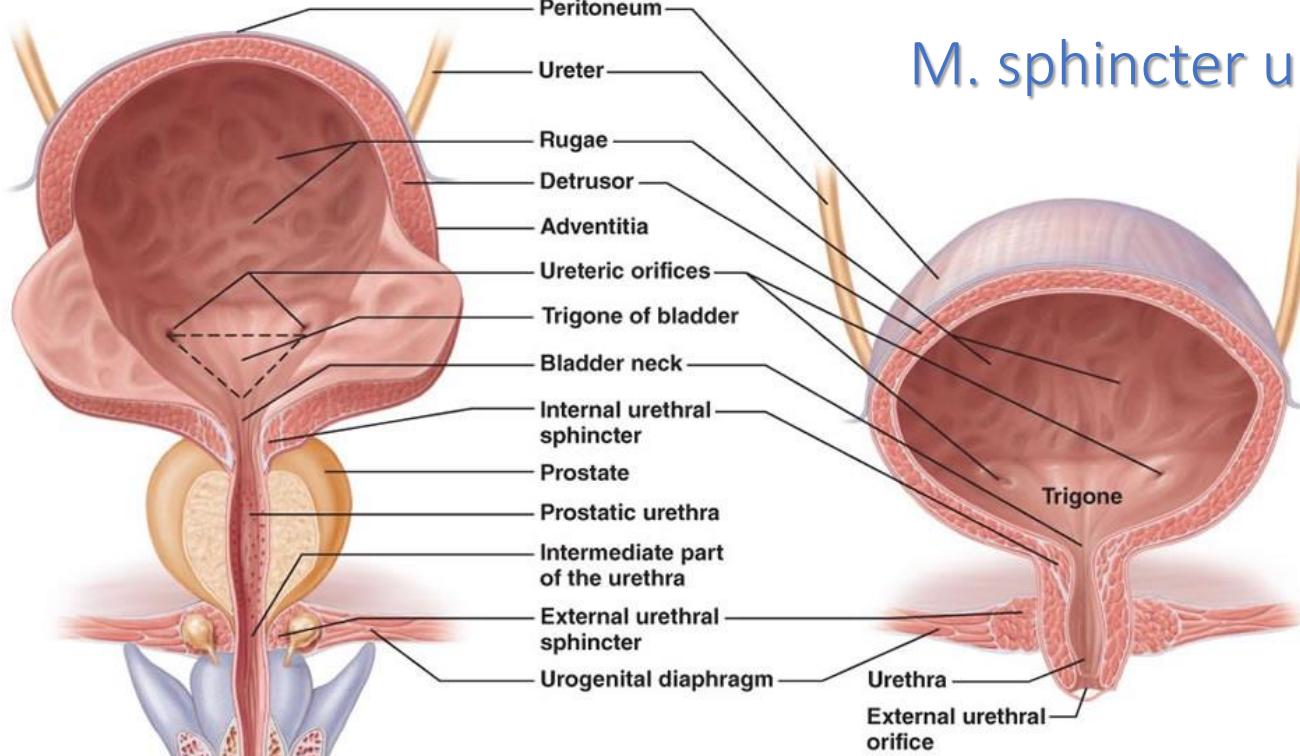
- m. sphincter urethrae
-
- A small orange female symbol (circle with a vertical line) indicating the female version of the diagram.
- m. sphincter urethrae
 - m. compressor urethrae
 - m. sphincter urethrovaginalis



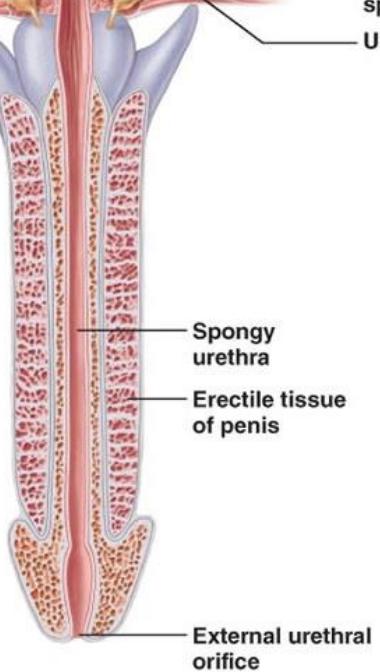
3 svěrače ženské močové trubice



M. sphincter urethrae (externus)

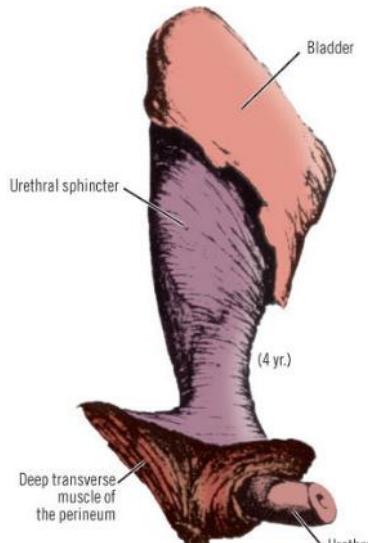


(b) Female.

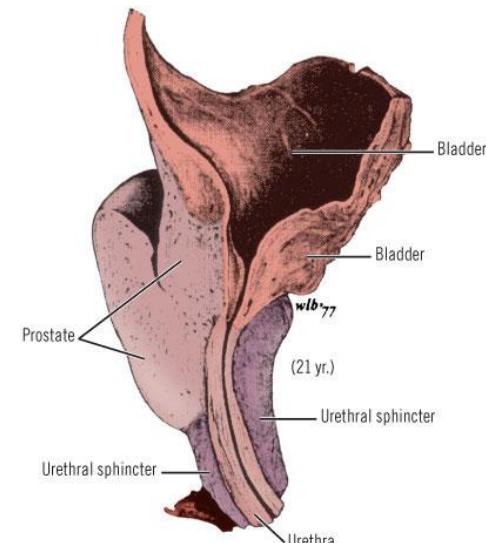


(a) Male. The long male urethra has three regions: prostatic, intermediate, and spongy.

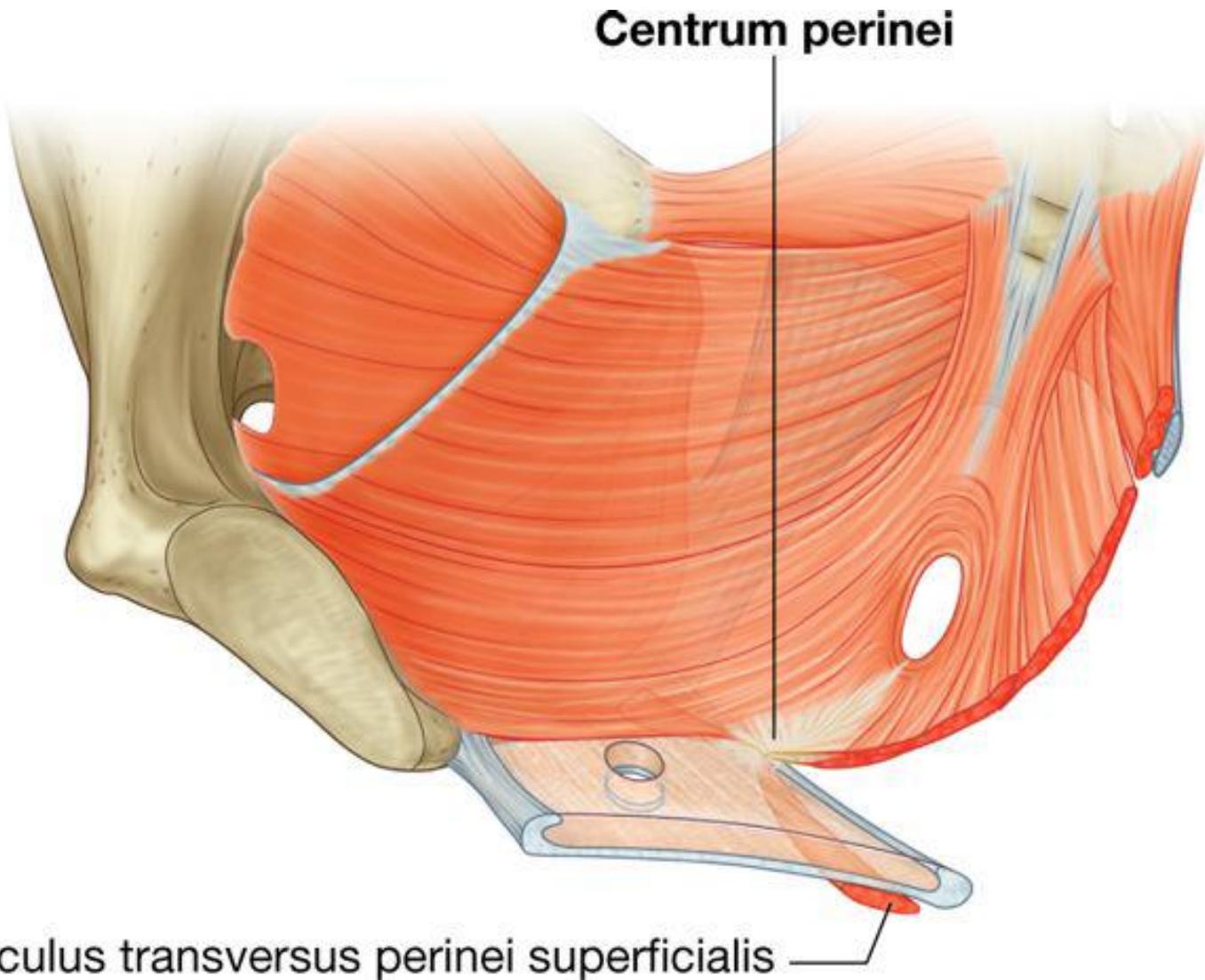
© 2013 Pearson Education, Inc.

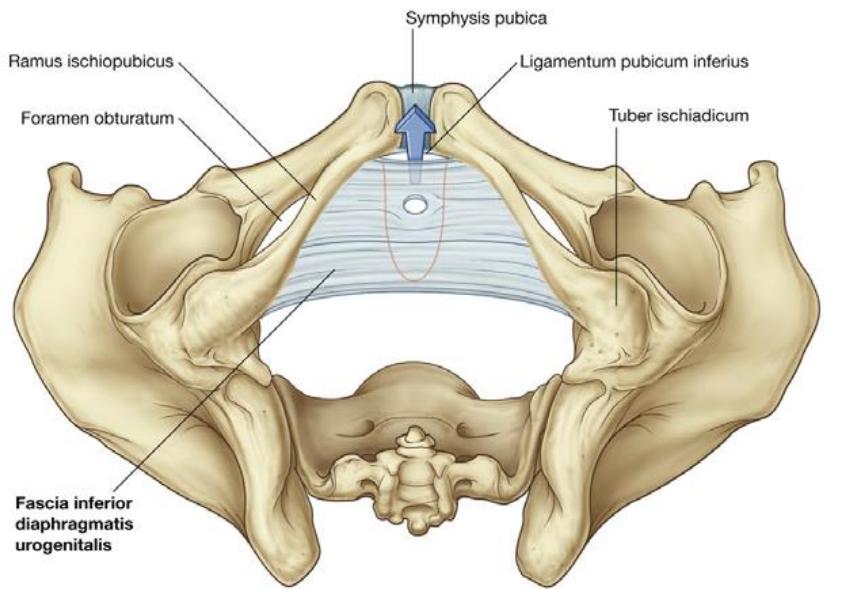
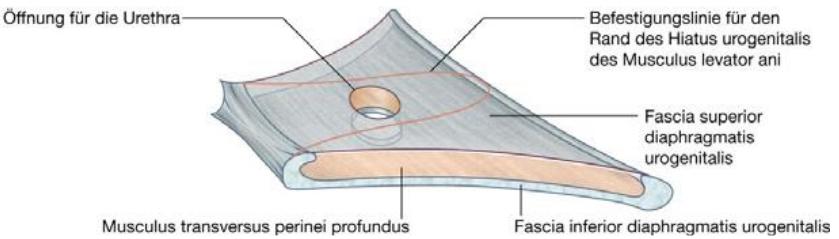
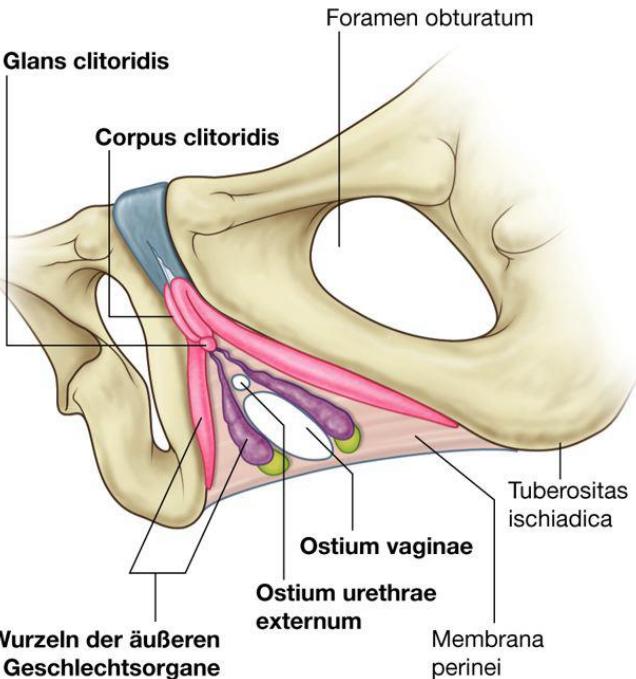
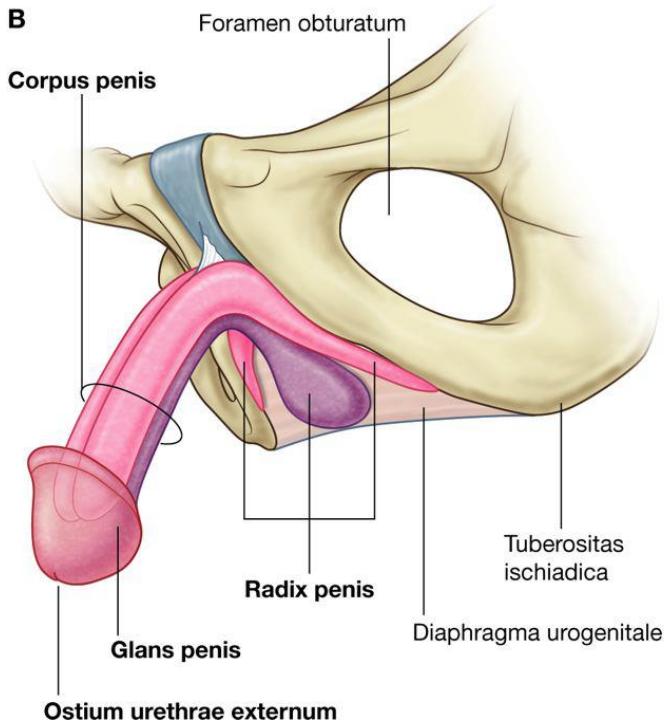


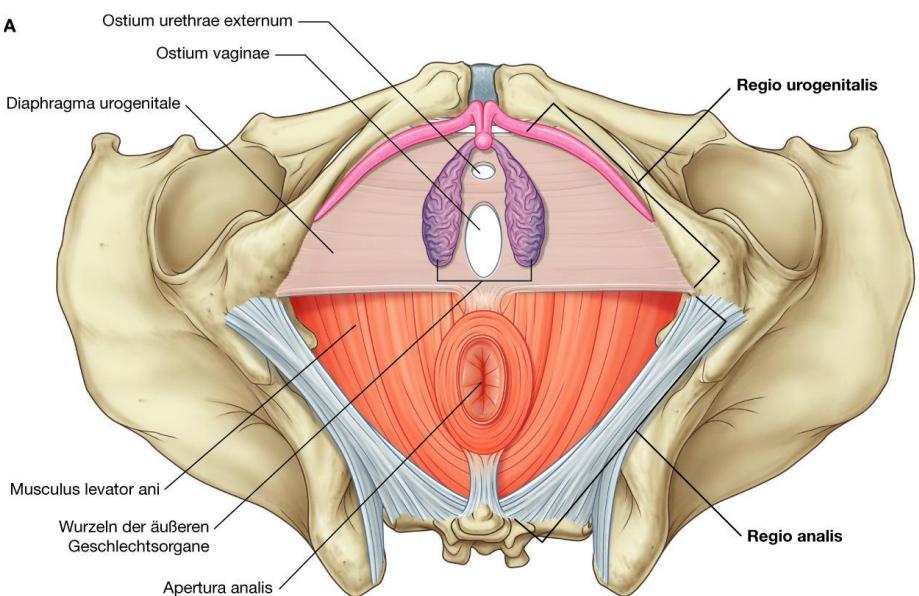
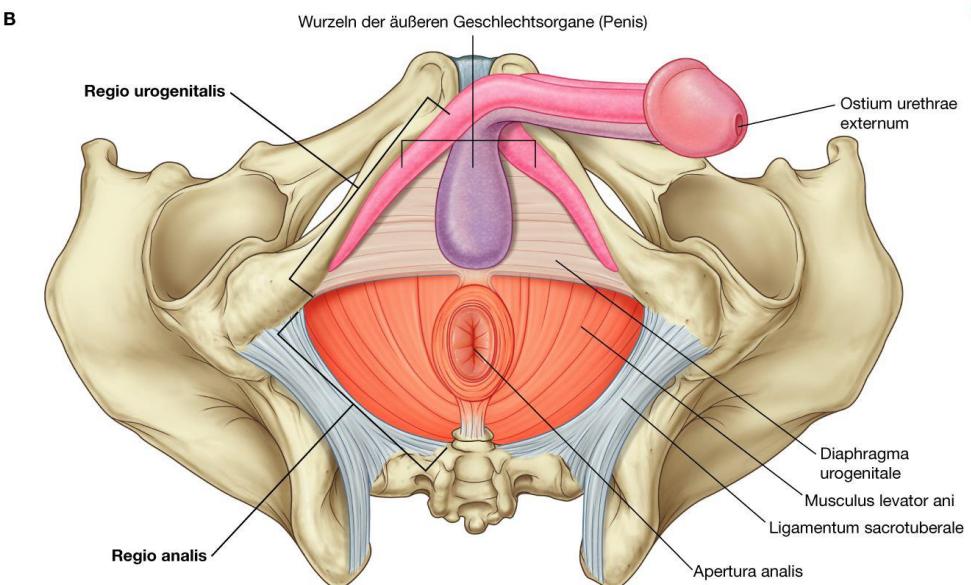
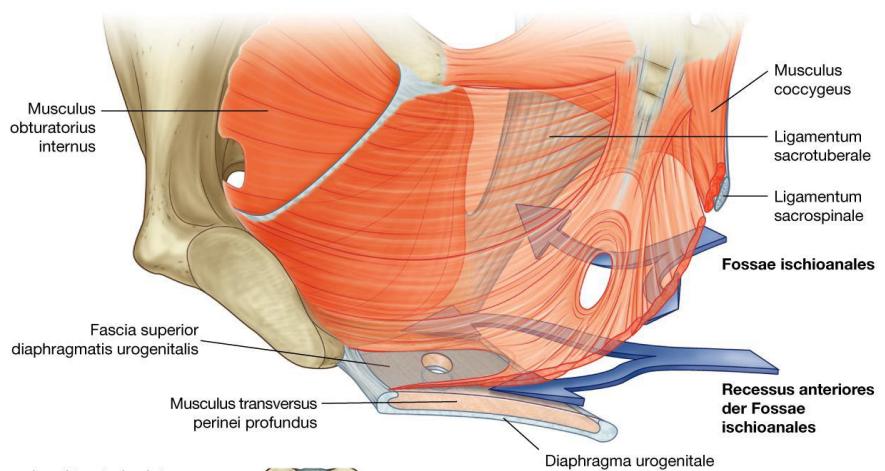
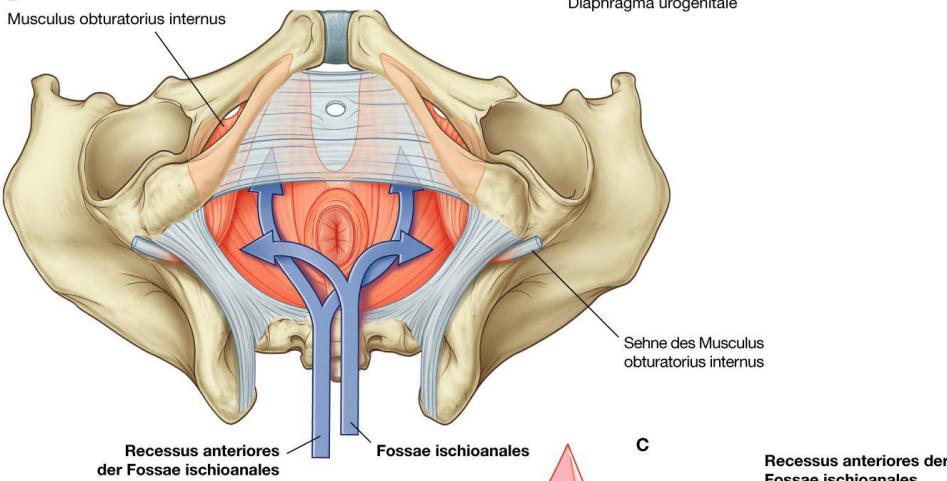
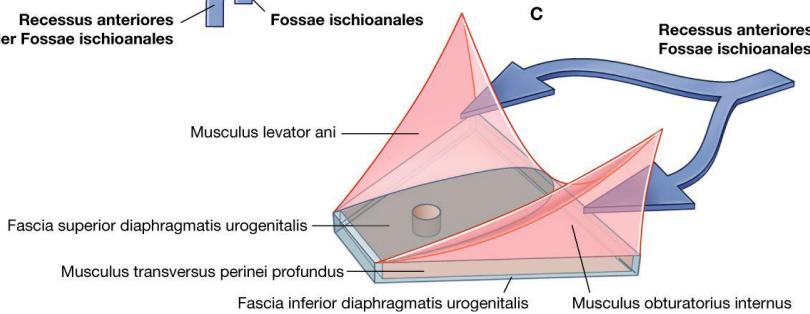
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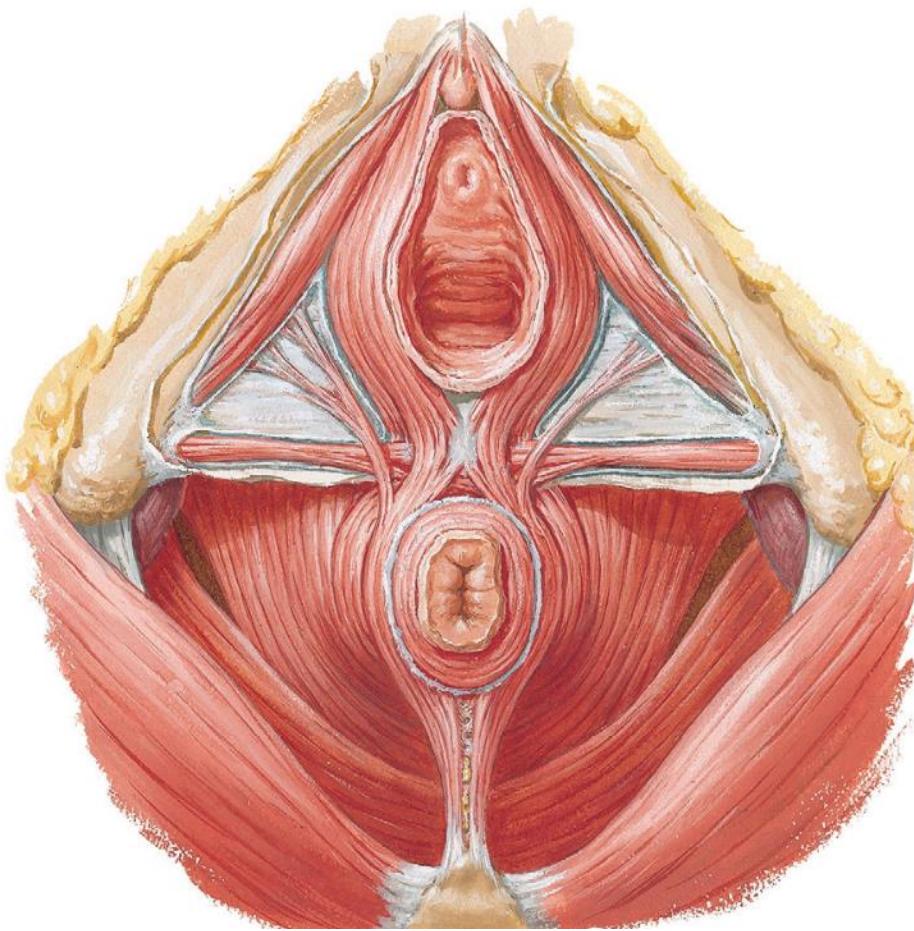
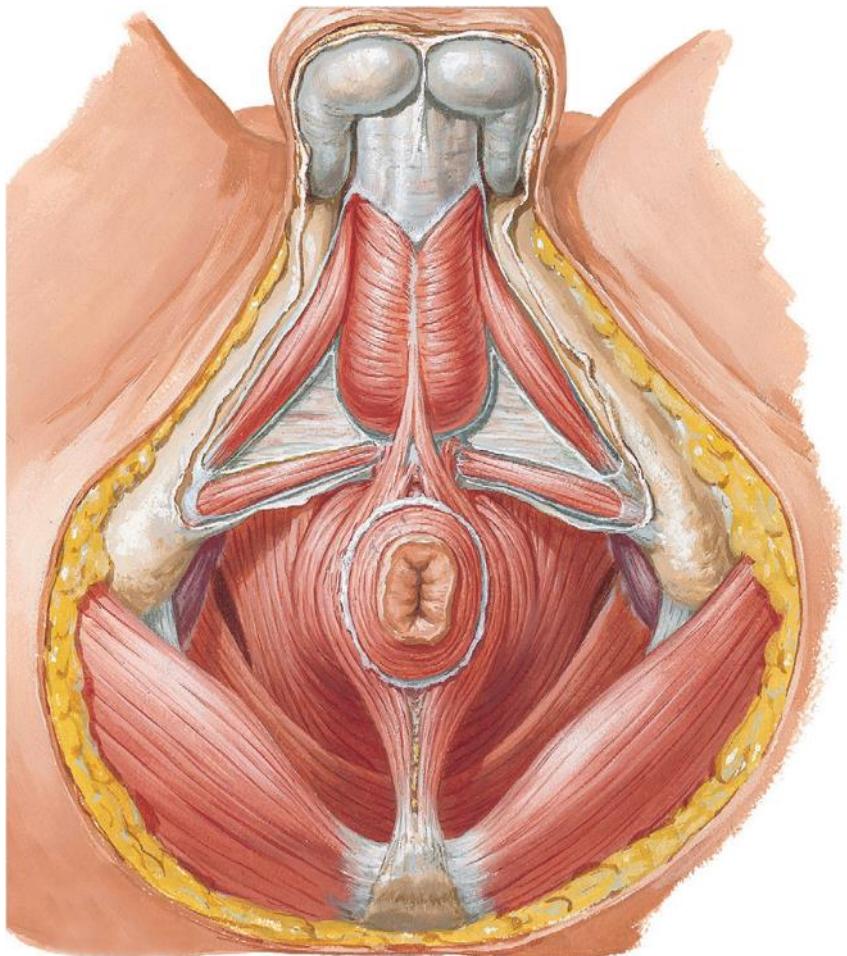


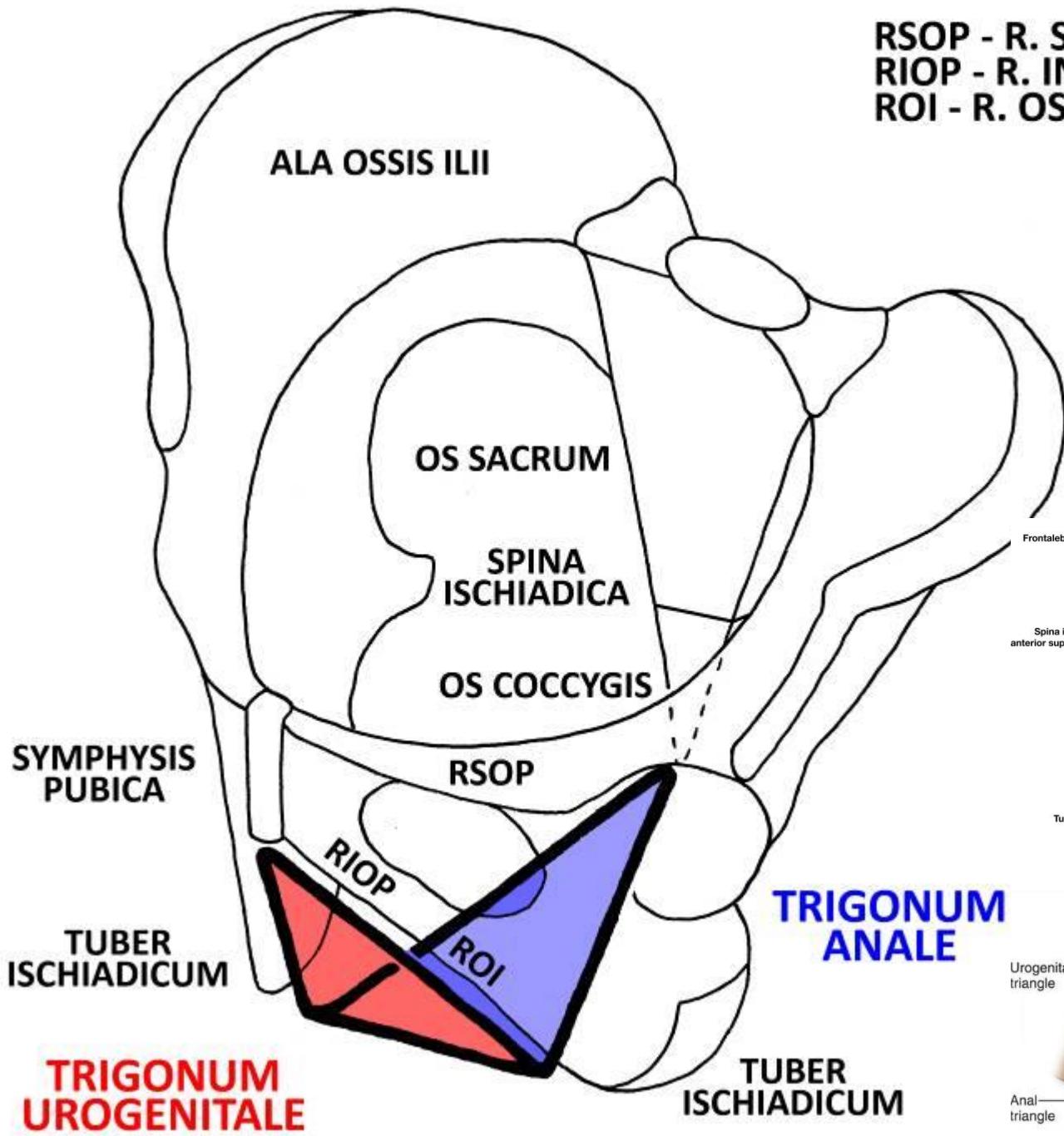
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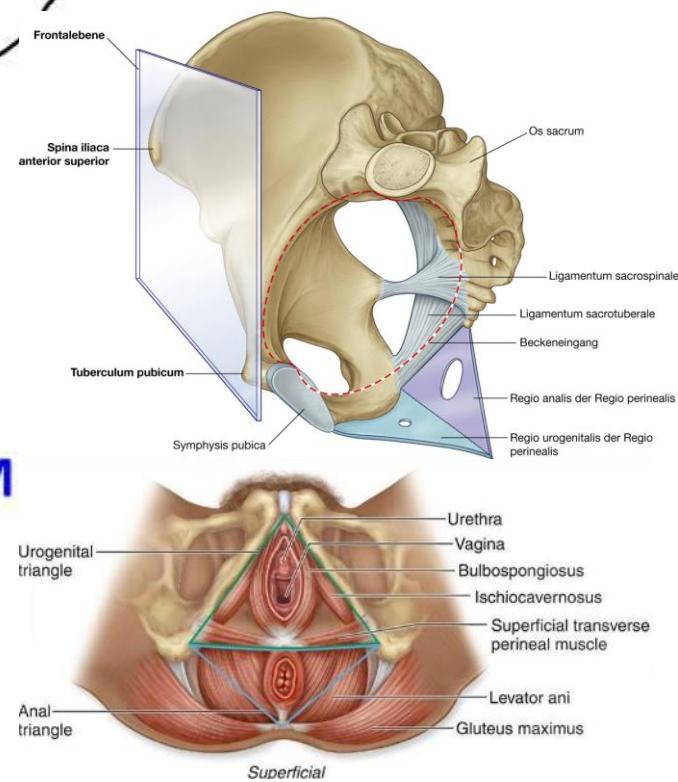
A**B****A****B**

A**B****A****B****C**

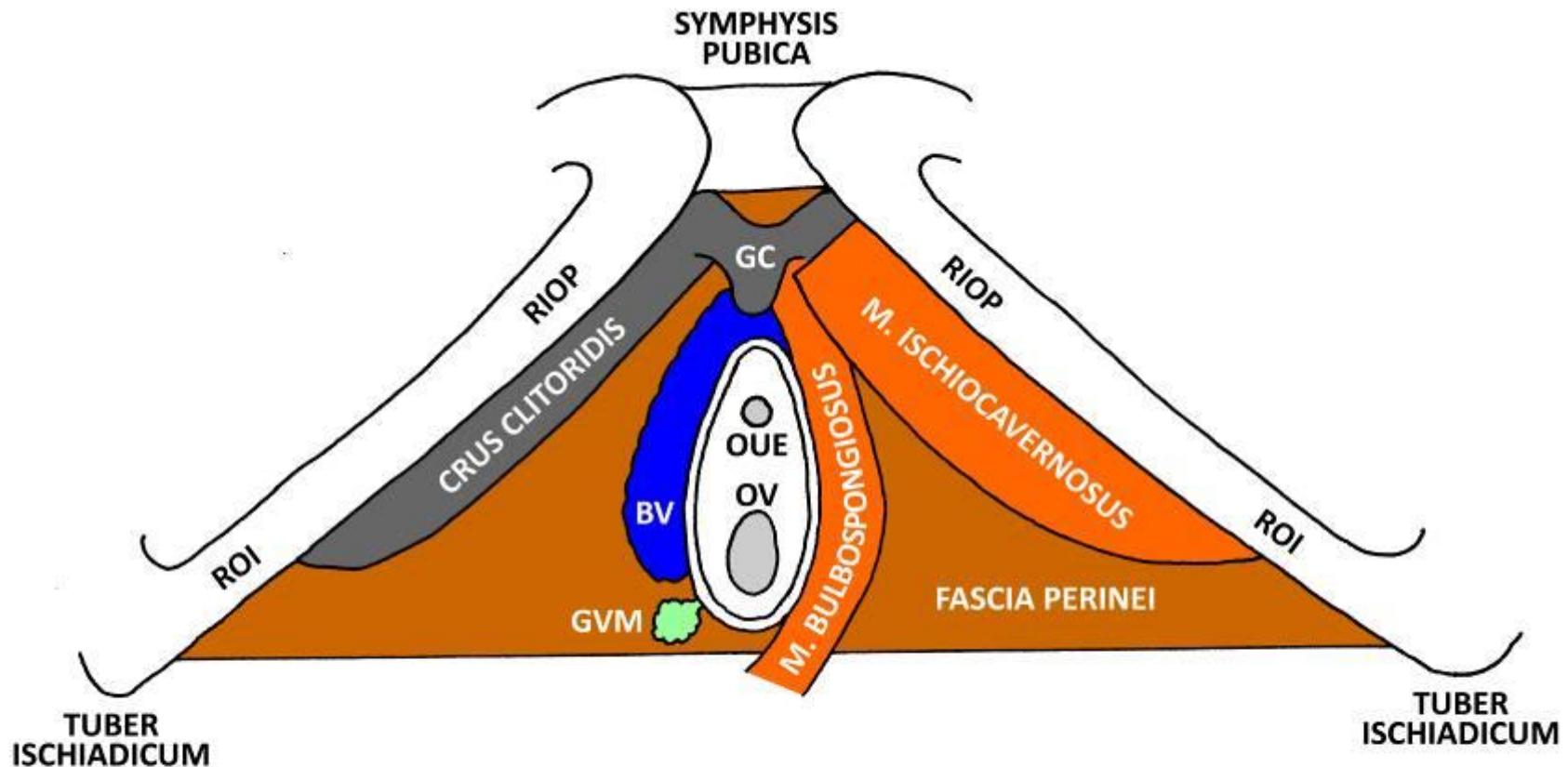




RSOP - R. SUPERIOR OSSIS PUBIS
RIOP - R. INFERIOR OSSIS PUBIS
ROI - R. OSSIS ISCHII



Trigonum urogenitale ♀



RIOP - R. INF. OSSIS PUBIS

ROI - R. OSSIS ISCHII

GC - GLANS CLITORIDIS

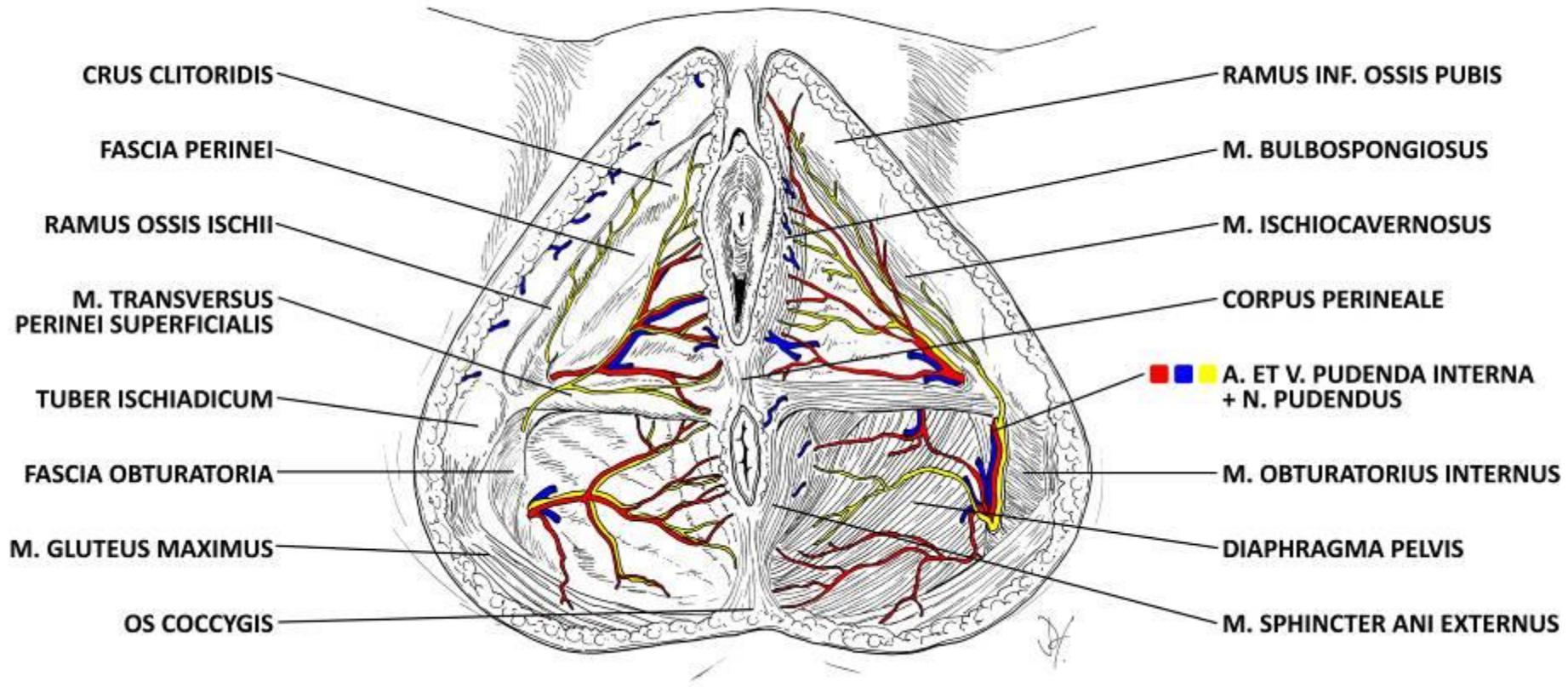
BV - BULBUS VESTIBULI

OUE - OSTIUM URETHRAE EXTERNUM

OV - ORIFICIUM VAGINAE

GVM - GLANDULA VESTIBULARIS MAJOR

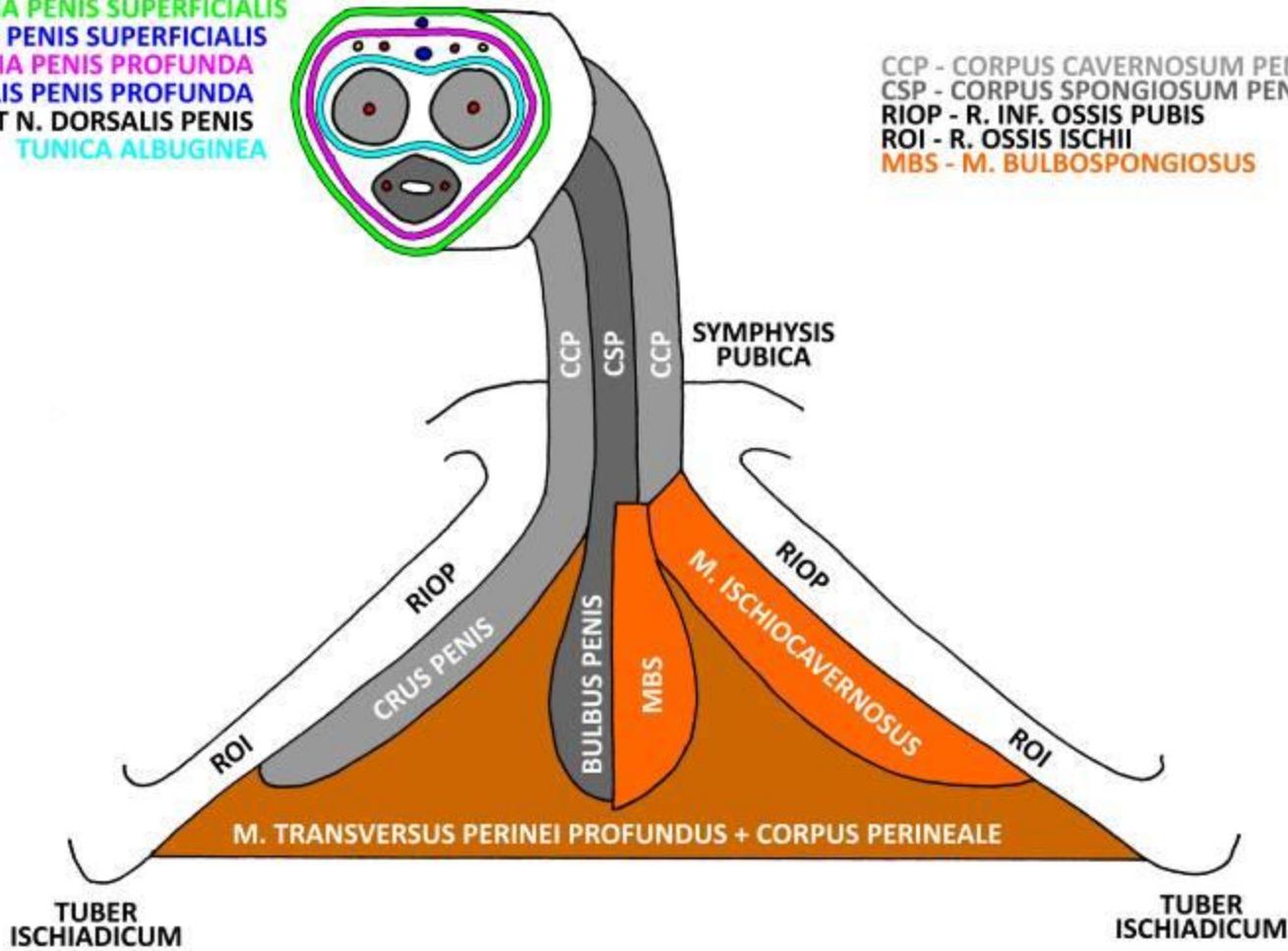
Regio perinealis ♀



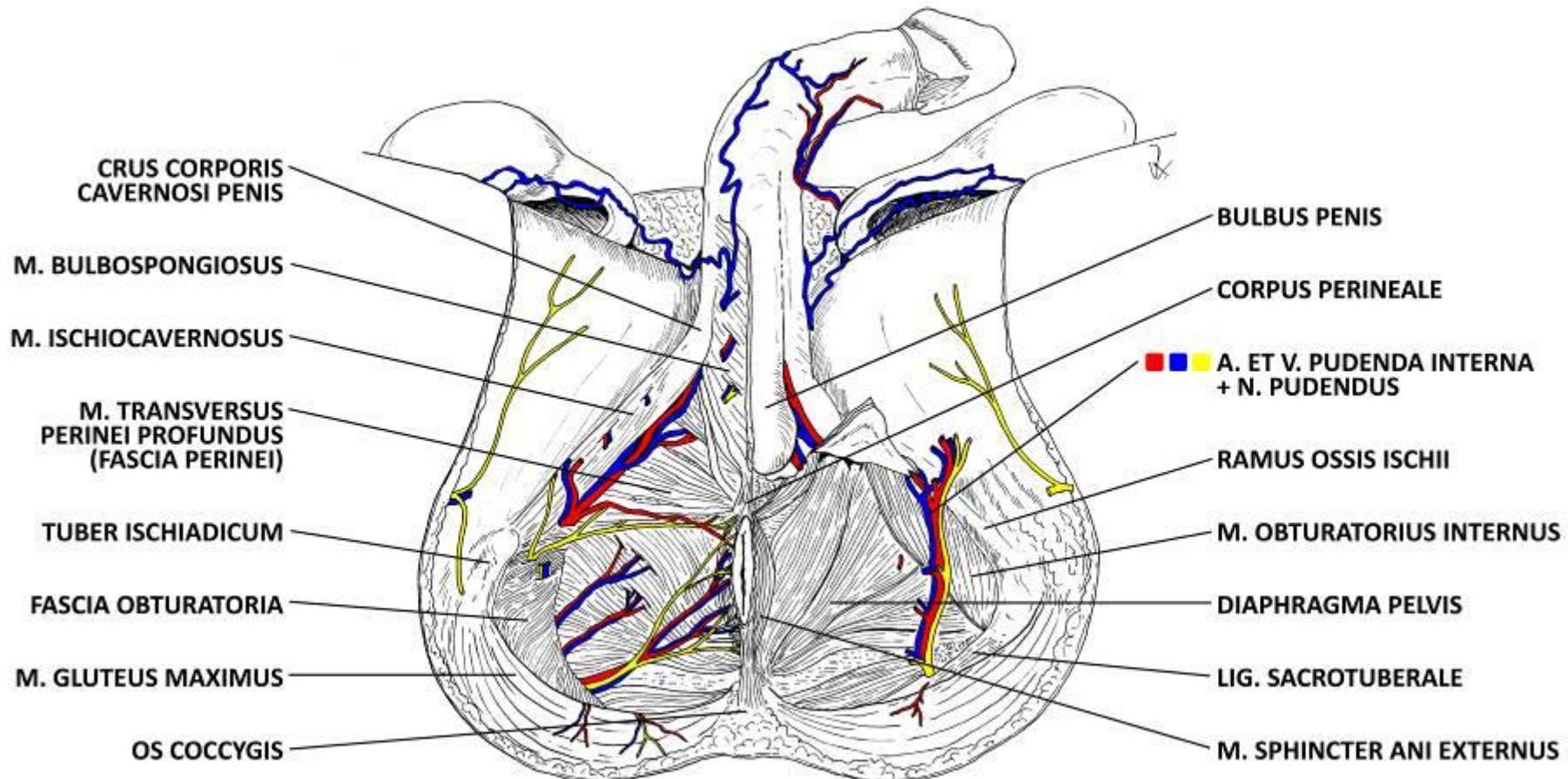
Trigonum urogenitale ♂

FASCIA PENIS SUPERFICIALIS
V. DORSALIS PENIS SUPERFICIALIS
FASCIA PENIS PROFUNDA
V. DORSALIS PENIS PROFUNDA
+ A. ET N. DORSALIS PENIS
TUNICA ALBUGINEA

CCP - CORPUS CAVERNOSUM PENIS + A. PROFUNDA PENIS
CSP - CORPUS Spongiosum PENIS + AA. URETHRALES
RIOP - R. INF. OSSIS PUBIS
ROI - R. OSSIS ISCHII
MBS - M. BULBOSPONGIOSUS



Regio perinealis ♂



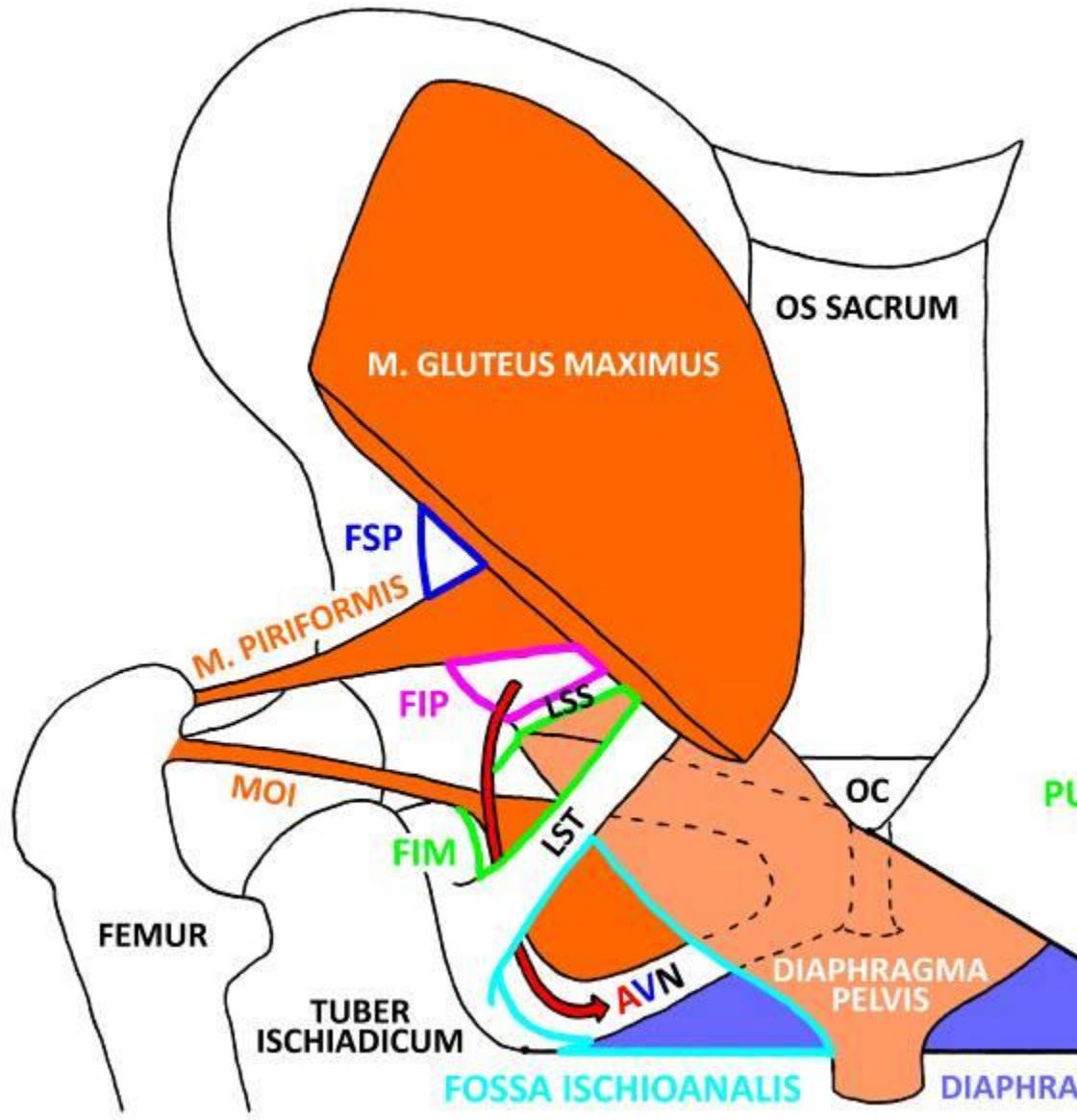
Fossa ischioanalis

OHRANIČENÍ:

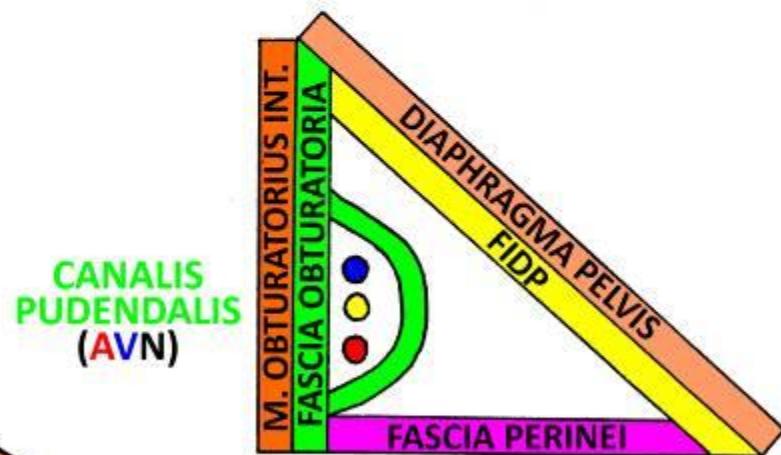
- MEDIOKRANIÁLNĚ + KRANÁLNĚ: m. sphincter ani externus, fascia inferior diaphragmatis pelvis
- LATERÁLNĚ: tuber ischiadicum, fascia obturatoria
- DORZÁLNĚ: dolní okraj m. gluteus maximus, lig. sacrotuberale
- KAUDÁLNĚ: fascia perinei superficialis

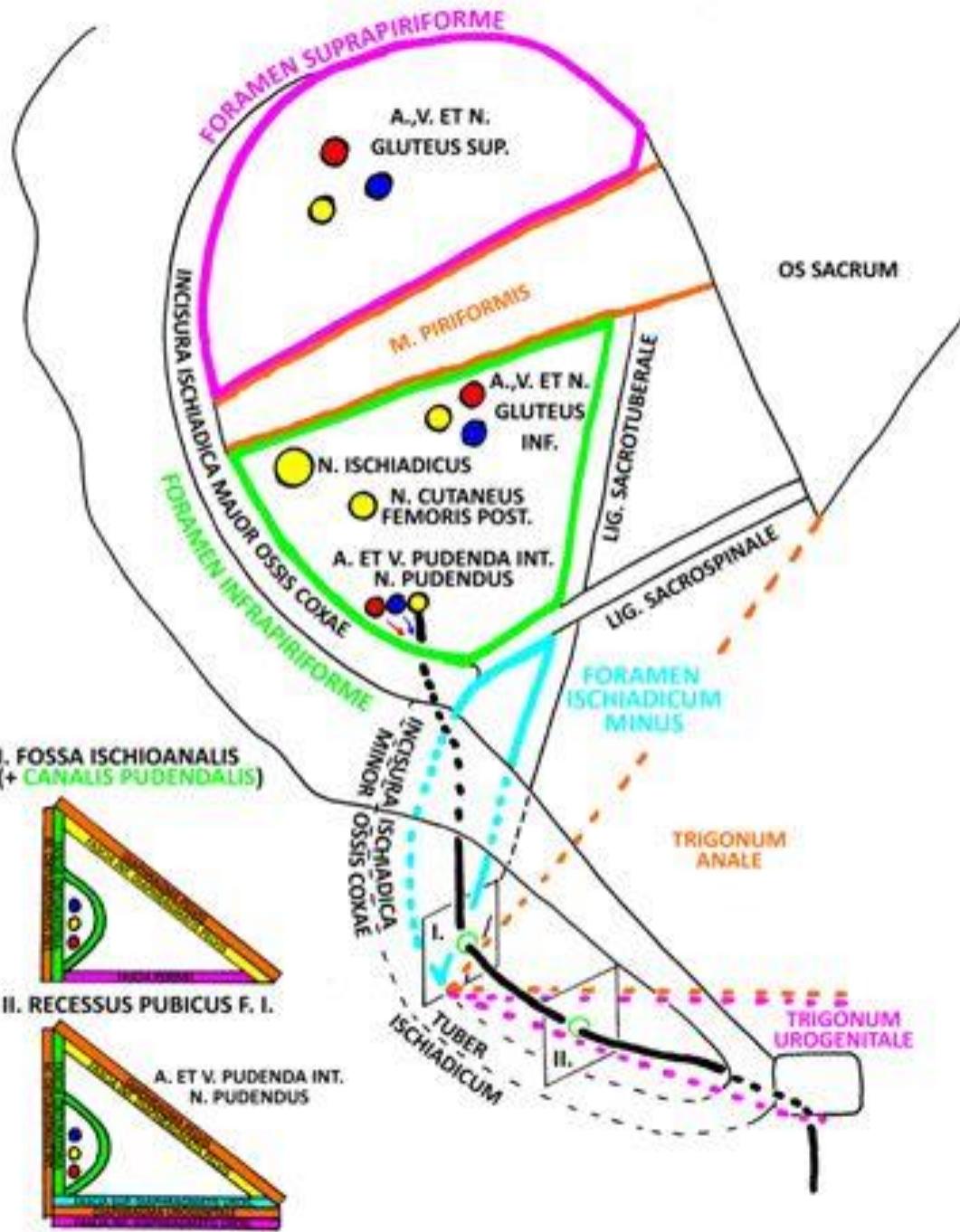
OBSAH:

- canalis pudendalis (*Alcocki*)
- corpus adiposum fossae ischioanalis
- párový recessus pubicus zasahuje ventrálne nad trigonum urogenitale až k symphysis pubica



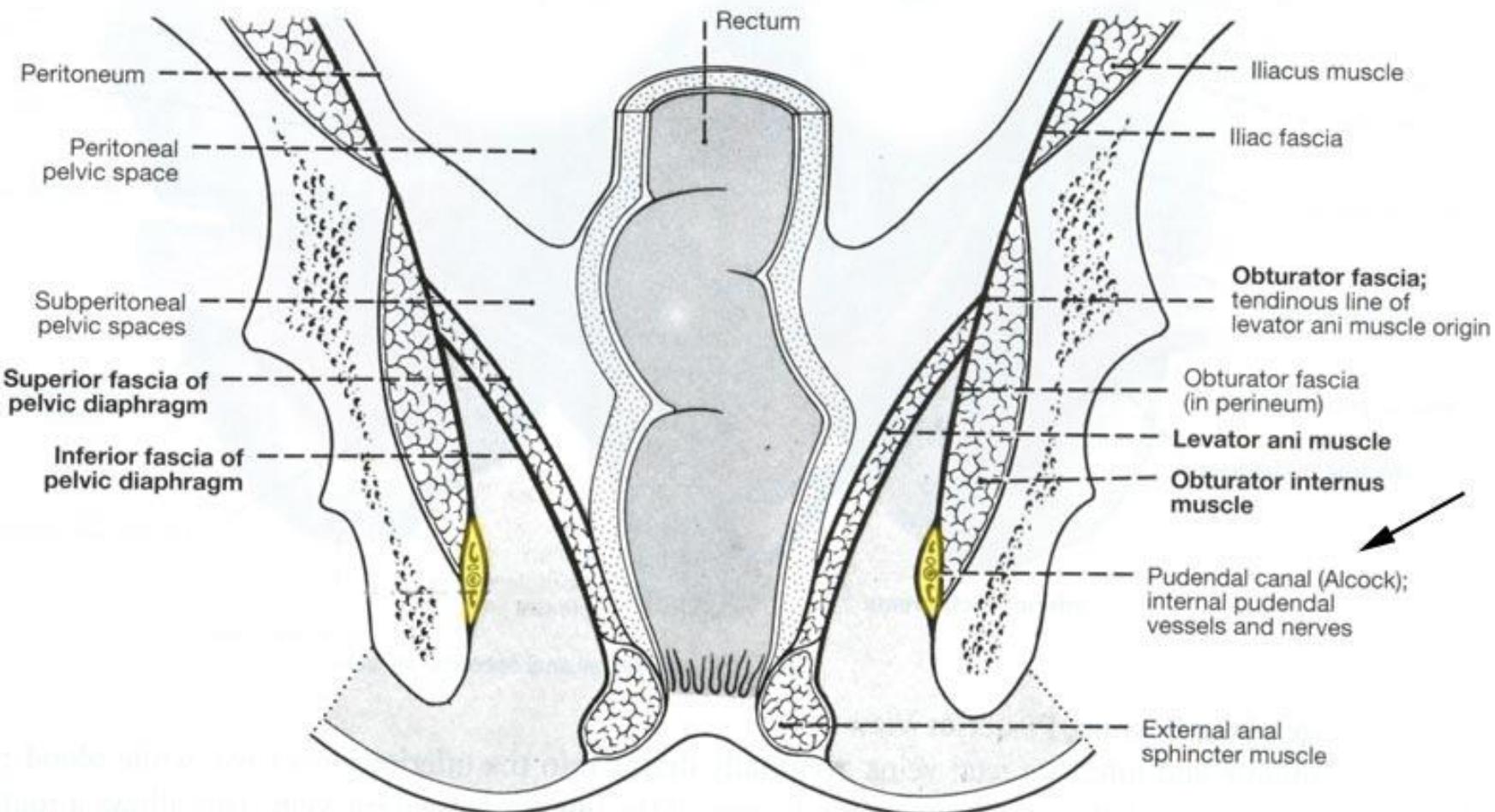
FSP - FORAMEN SUPRAPIRIFORME
 FIP - FORAMEN INFRAPIRIFORME
 LSS - LIG. SACROSPINALE
 MOI - M. OBTURATORIUS INTERNUS
 FIM - FORAMEN ISCHIADICUM MINUS
 LST - LIG. SACROTUBERALE
 OC - OS COCCYGIS
 AVN - A. ET V. PUDENDA INTERNA
 + N. PUDENDUS
 FIDP - FASCIA INF. DIAPHRAGMatis PELVIS

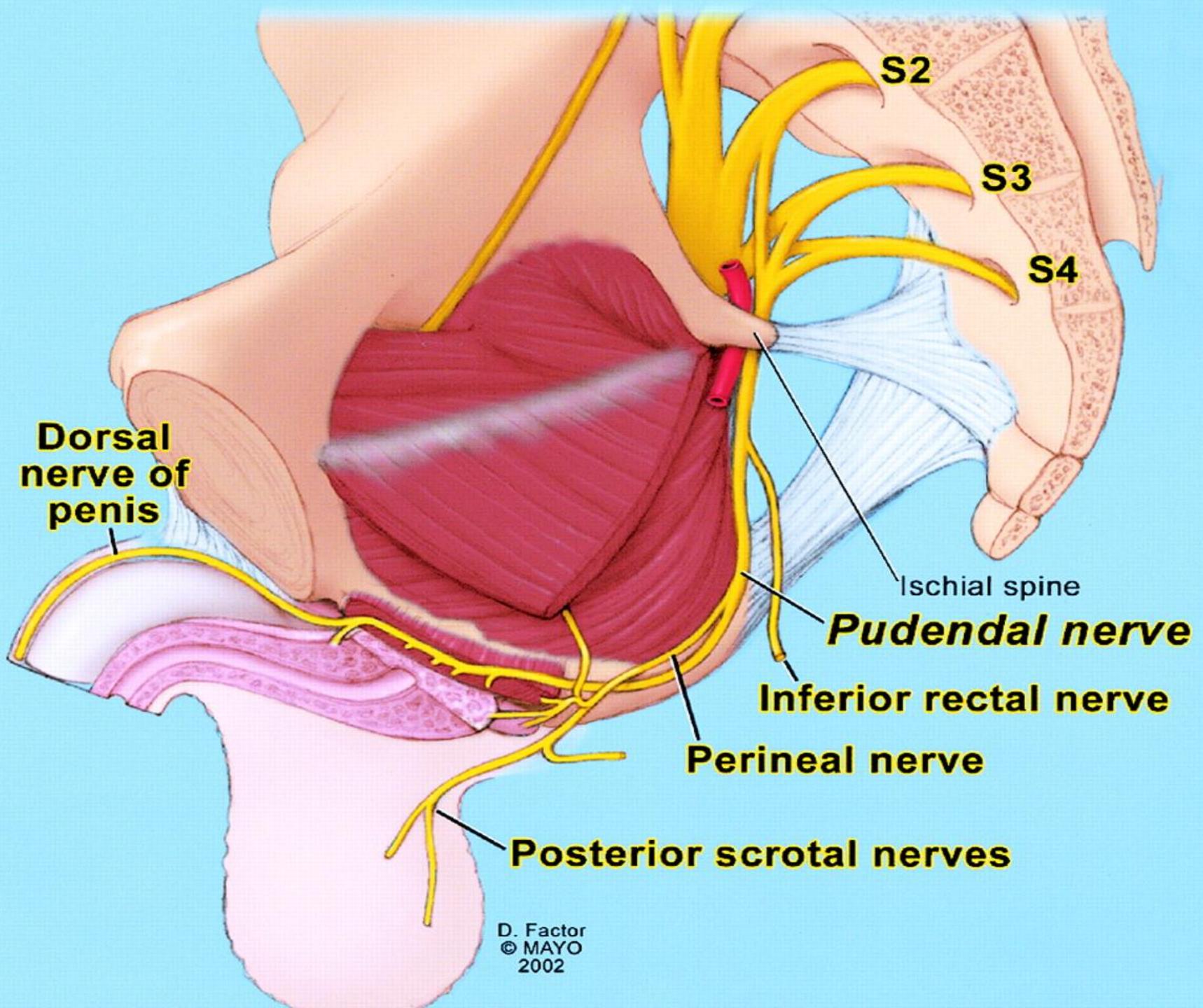


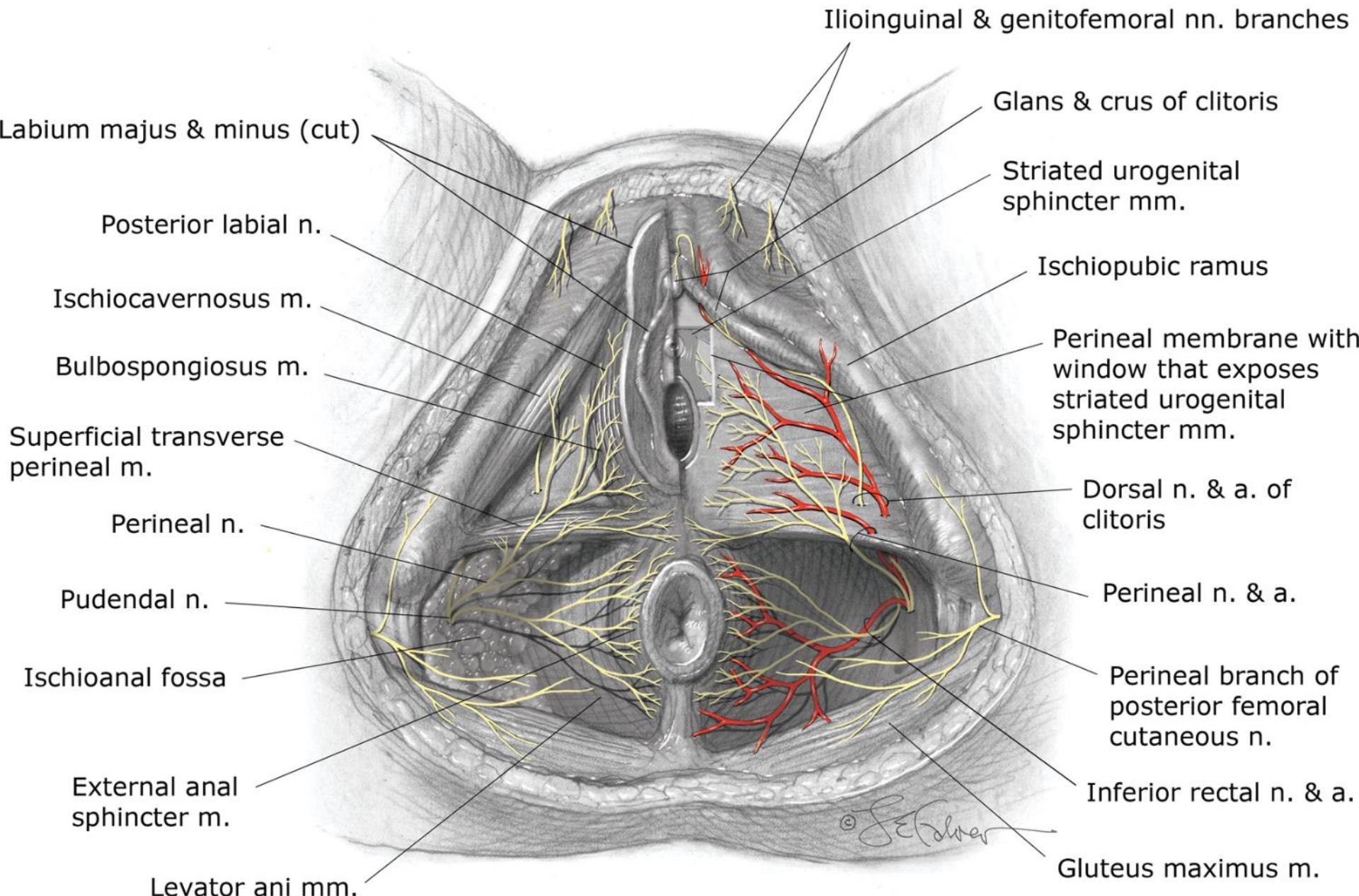


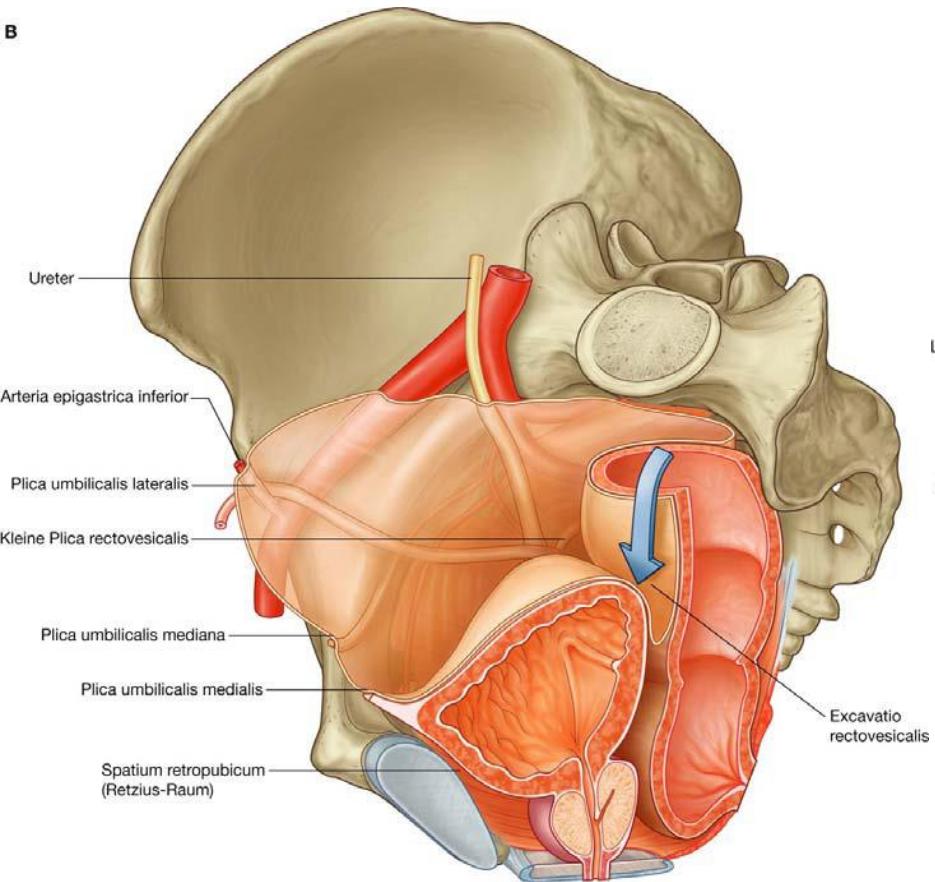
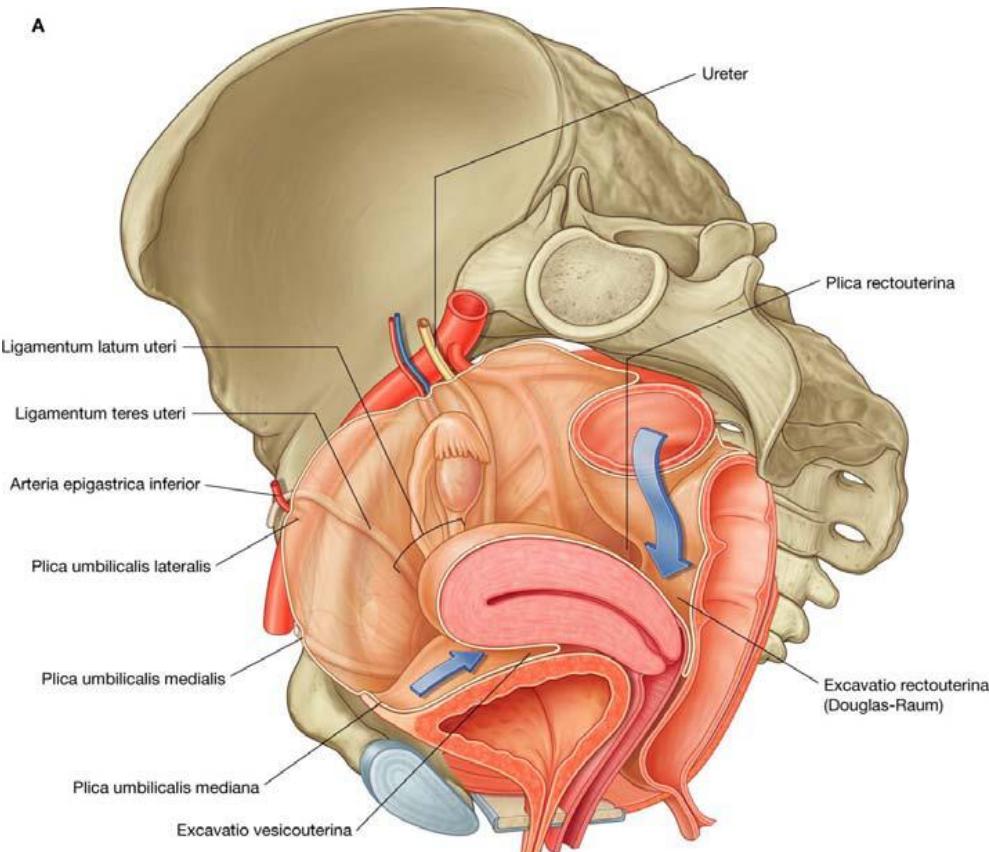
Canalis pudendalis Alcocki

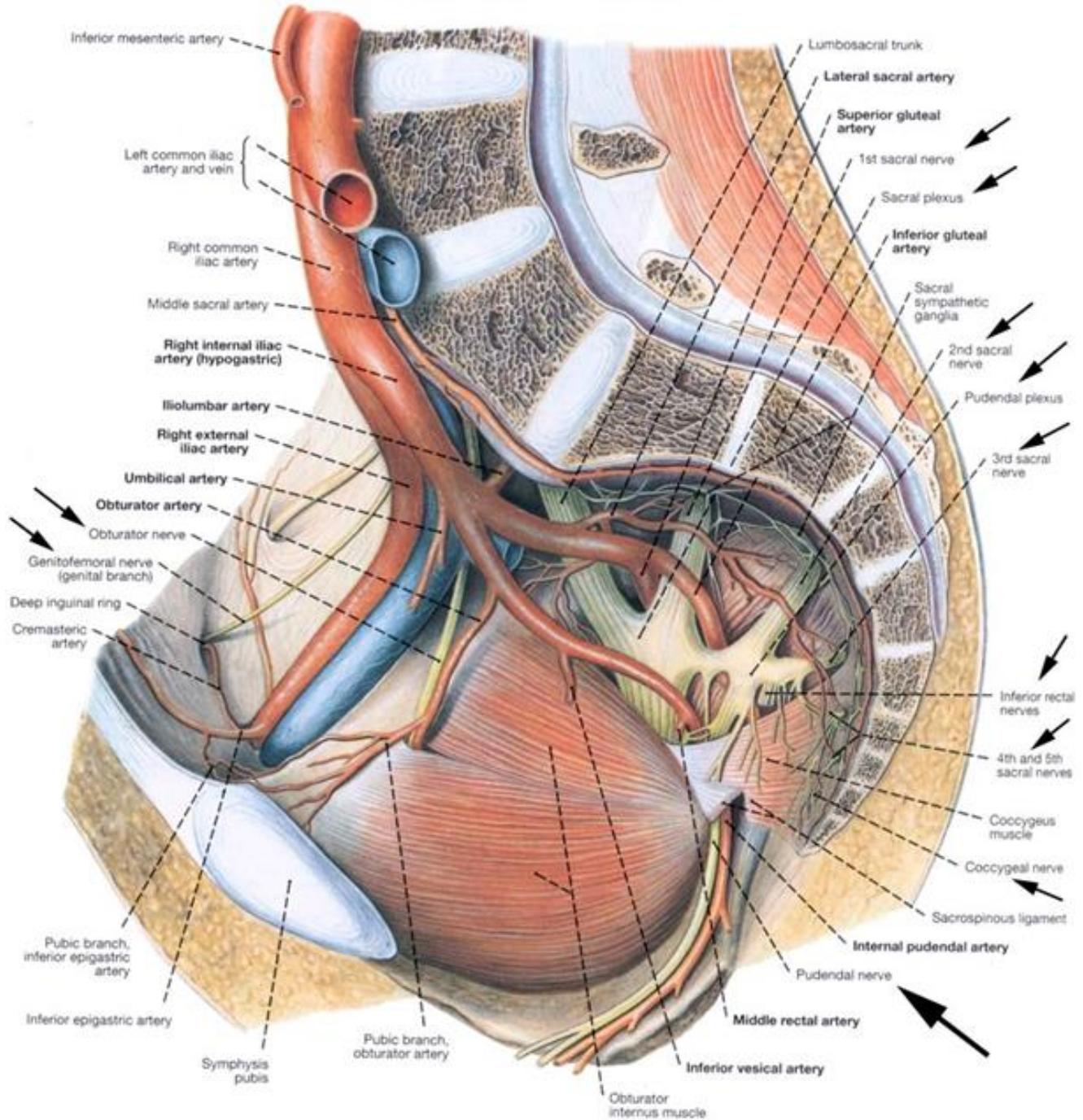
Pelvis and Perineum Frontal Section

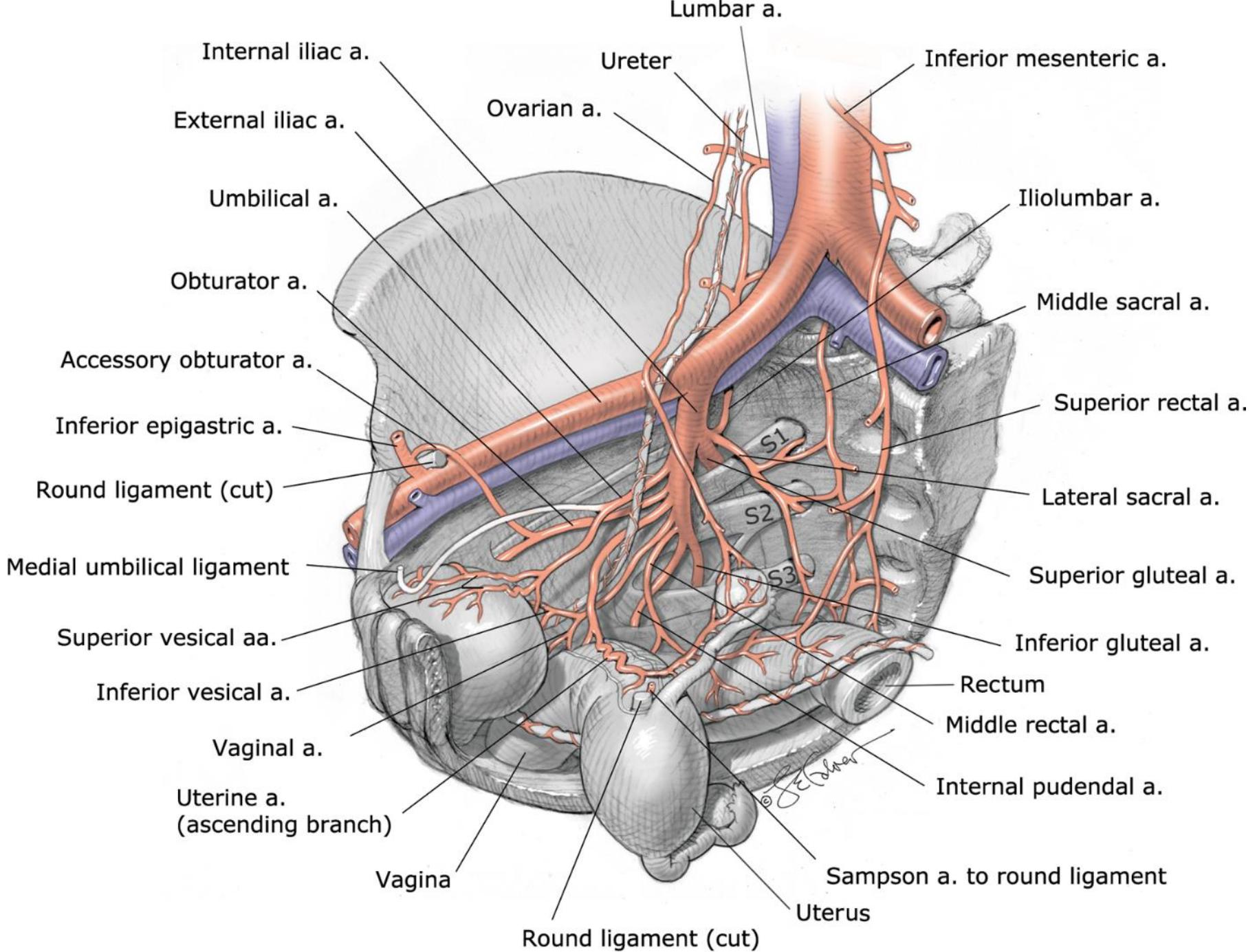


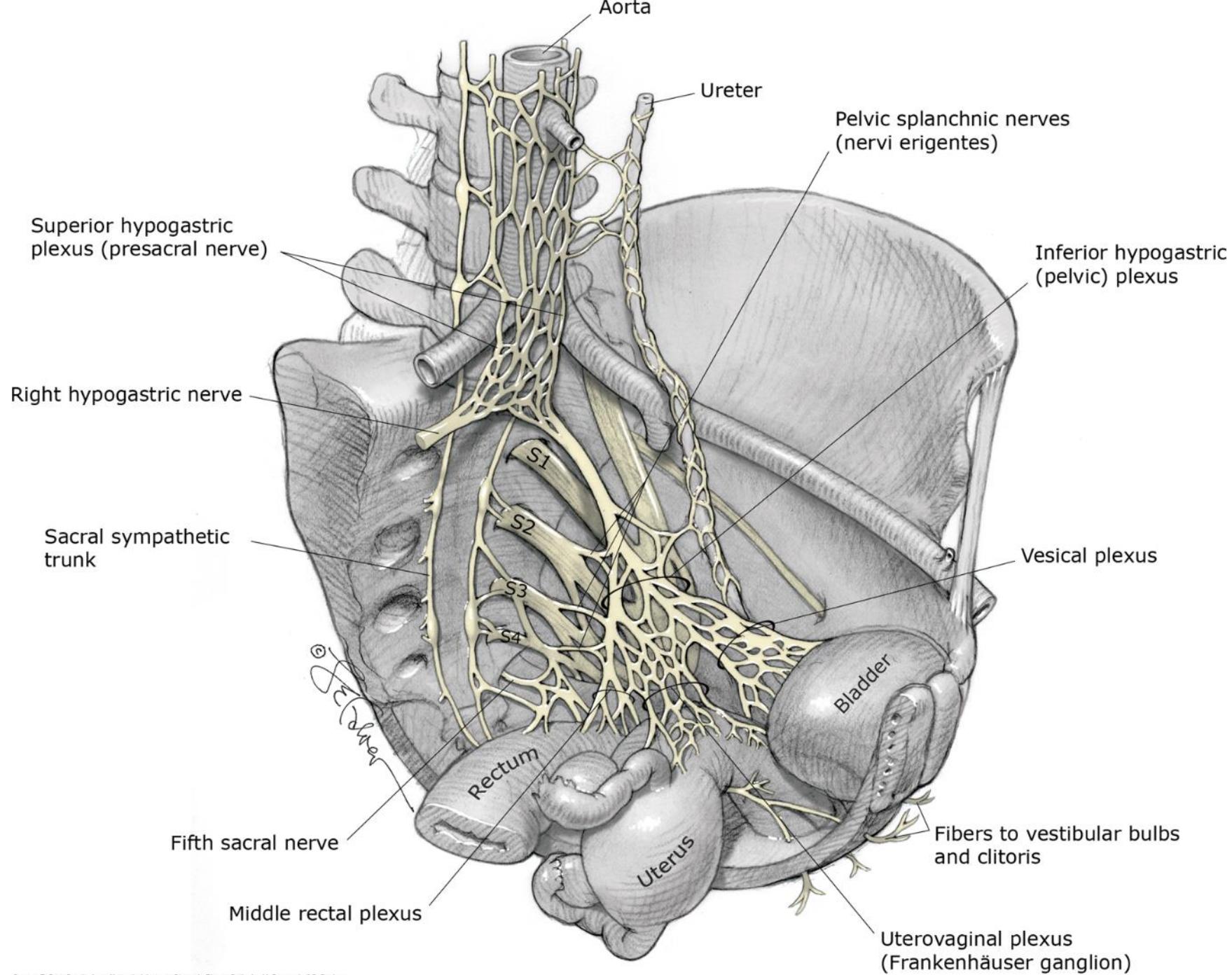




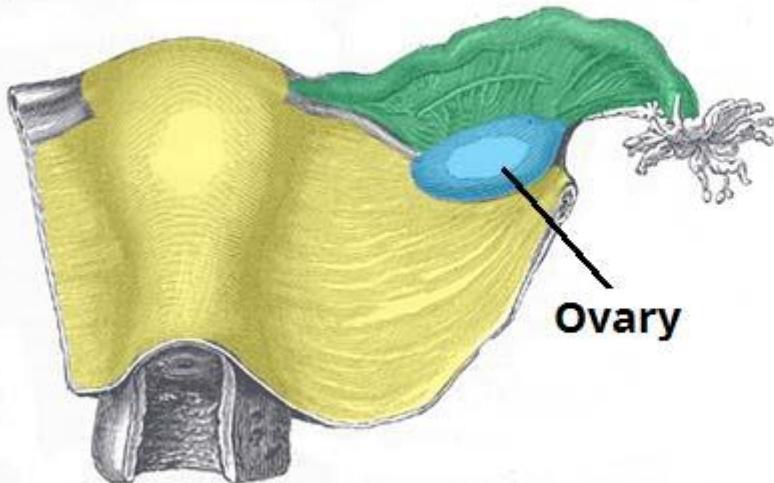
B**A**



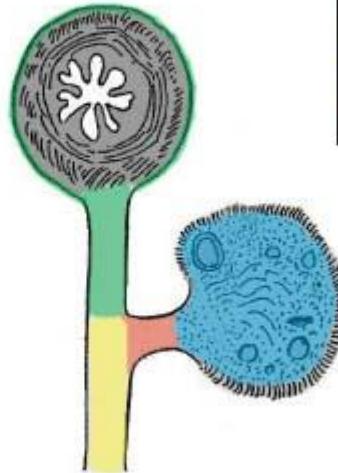




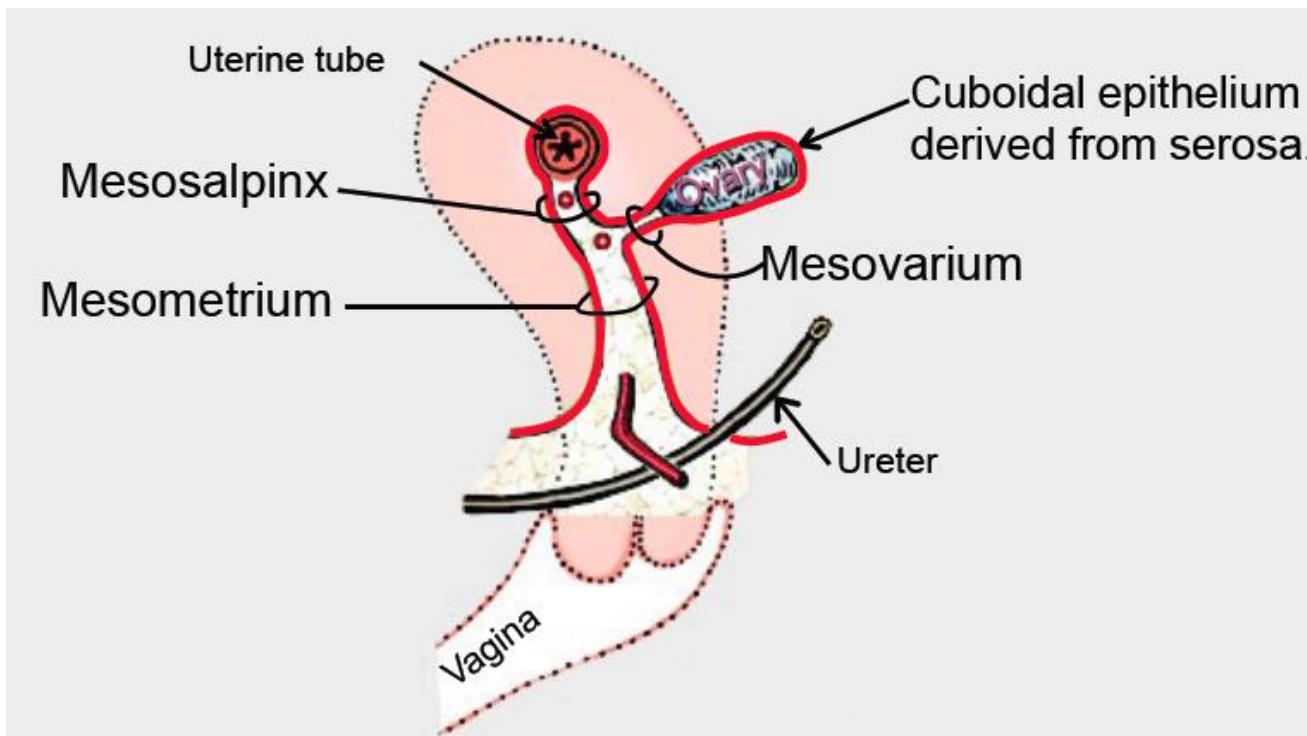
Coronal Plane:

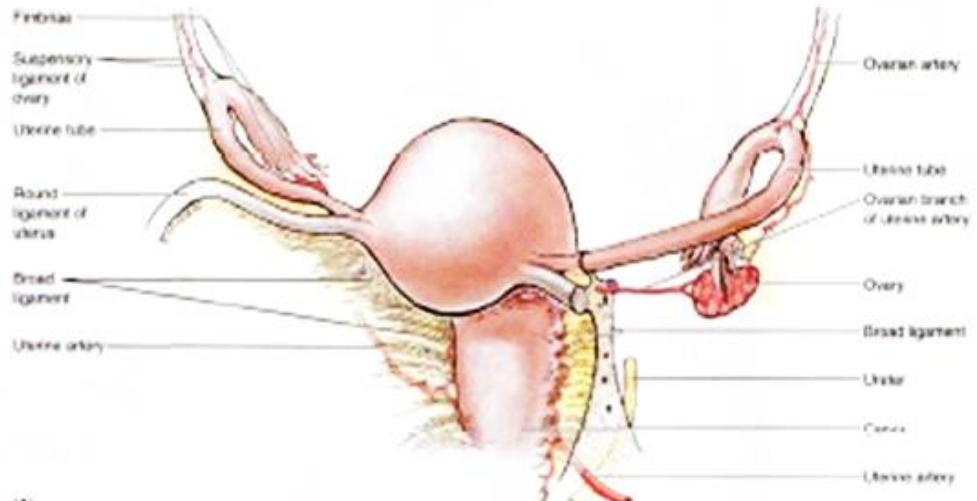
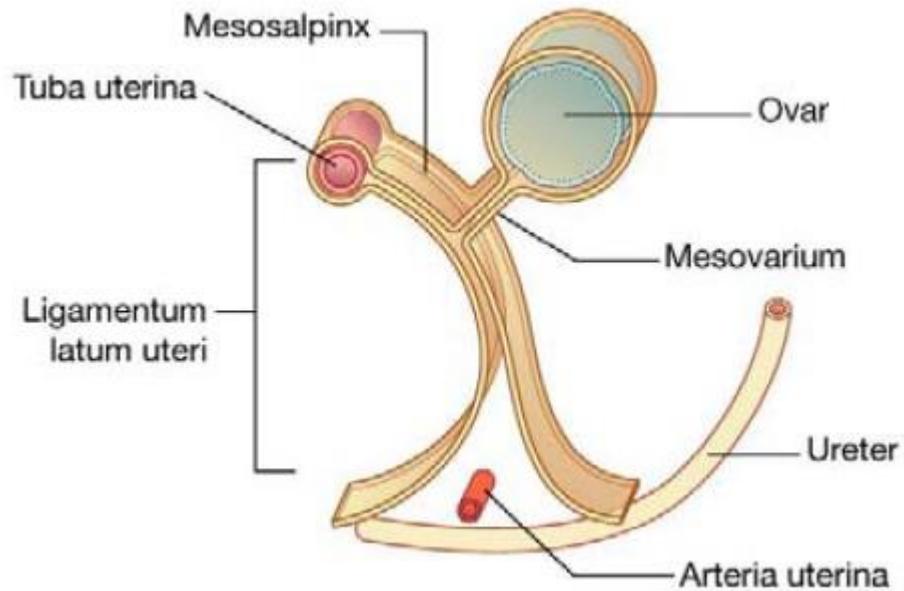


Sagittal Plane:

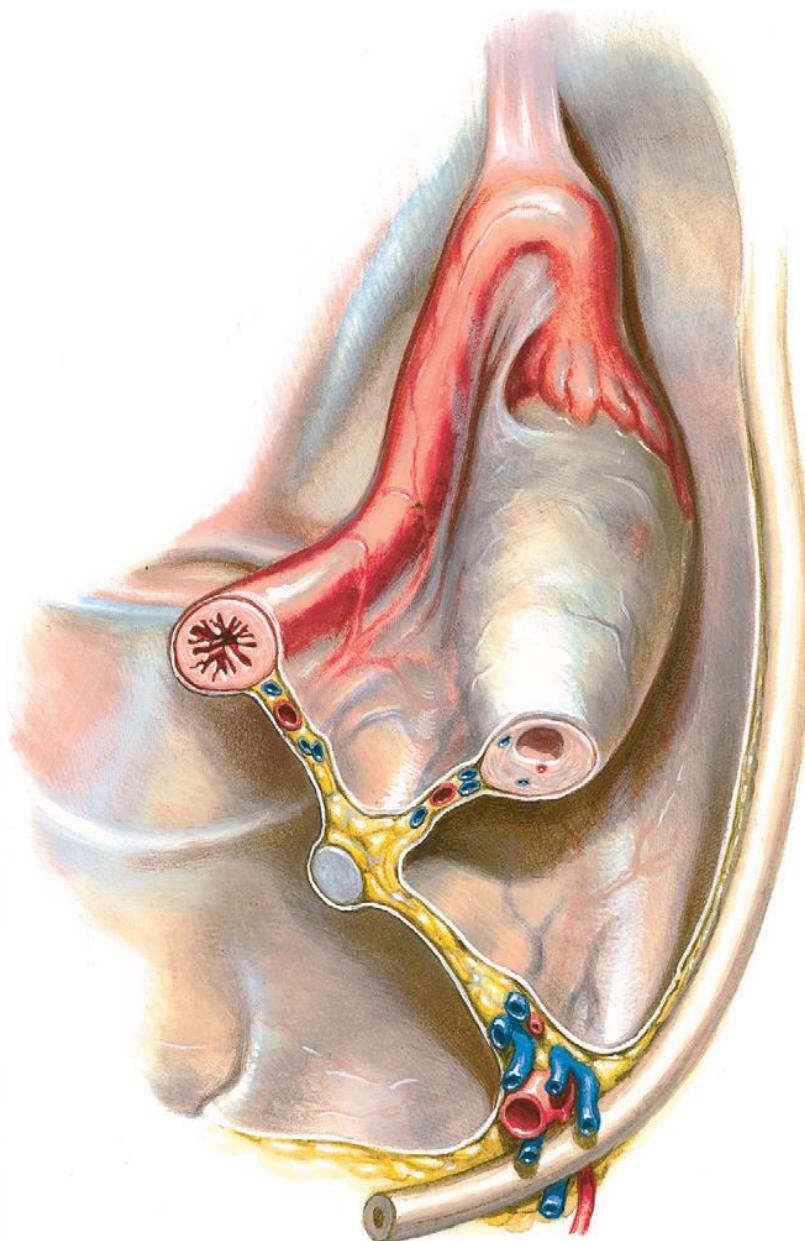


- [Yellow Box] Mesometrium
- [Green Box] Mesosalpinx
- [Red Box] Mesovarium



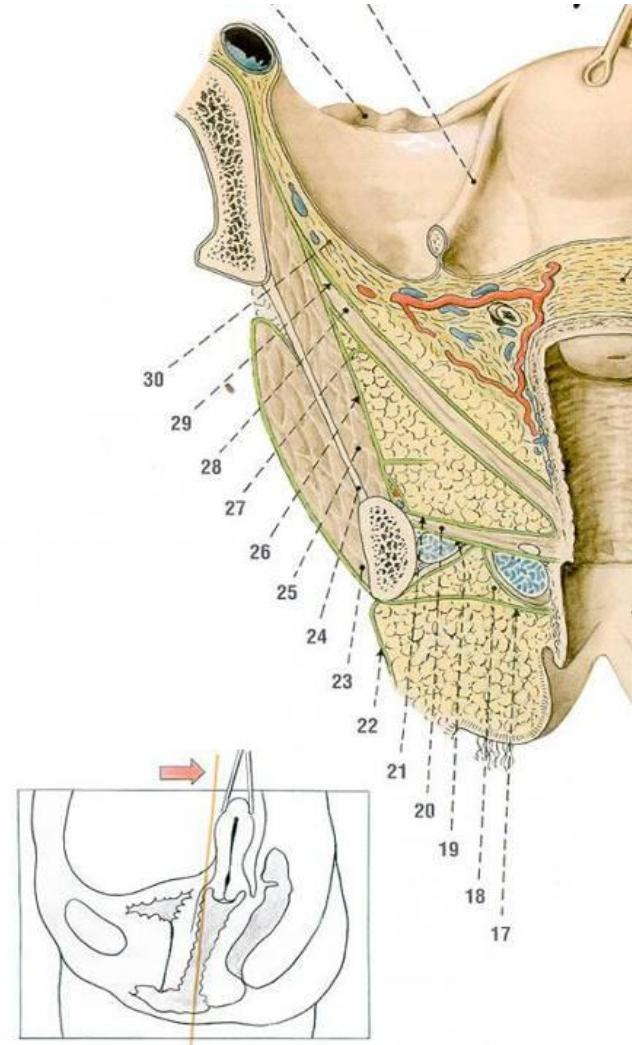


(A)

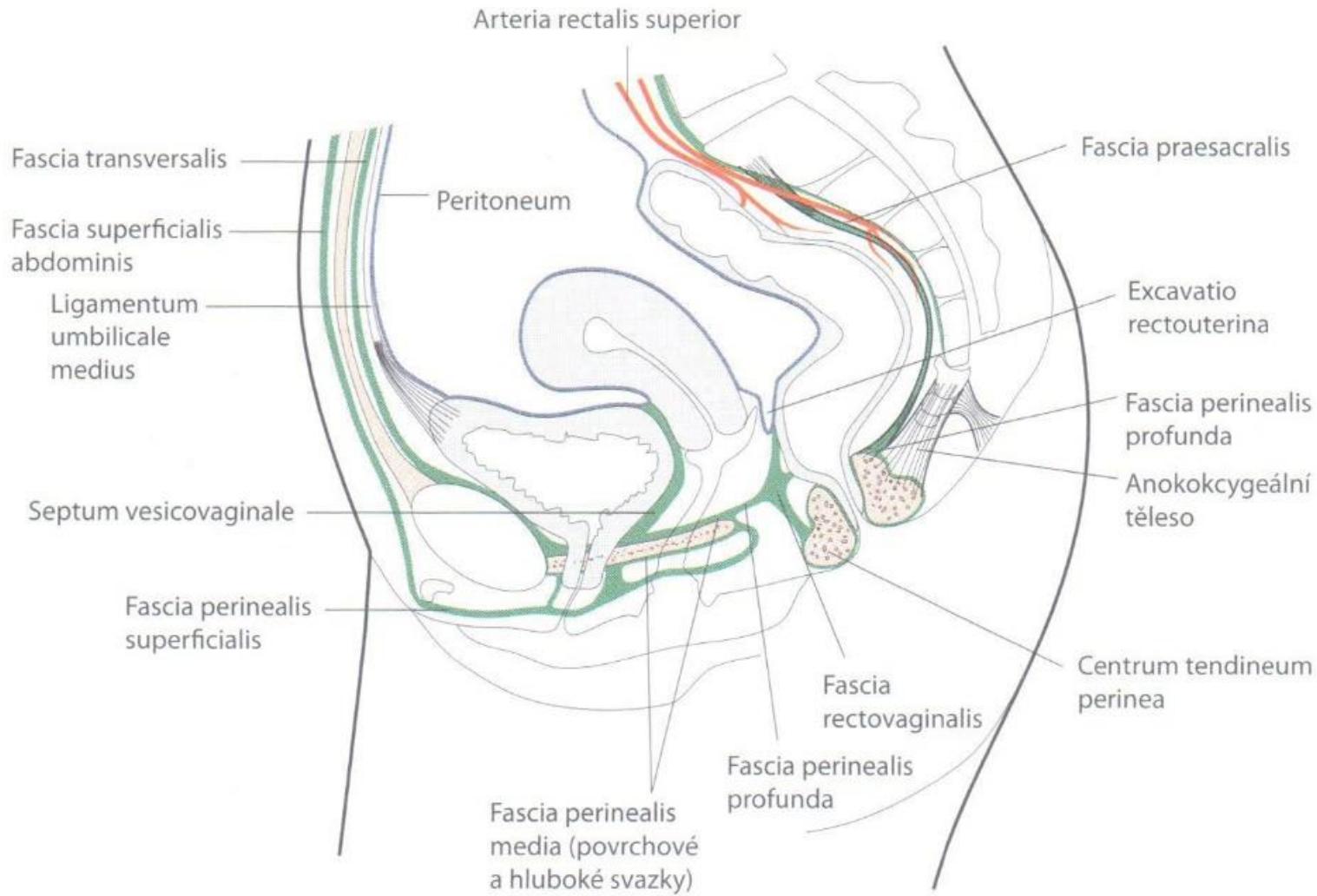


Fascie ženské malé pánve

- ***stratum membranosum telae subcutaneae***
 - „fascia perinei superficialis Collesi“
- ***fascia perinei***
 - *fascia investiens perinei superficialis*
 - „fascia perinei profunda Gallaudeti, fascia diaphragmatis urogenitalis inferior“
- ***membrana perinei***
 - „diaphragma urogenitale, fascia diaphragmatis urogenitalis superior“
- ***fascia diaphragmatis pelvis inferior***

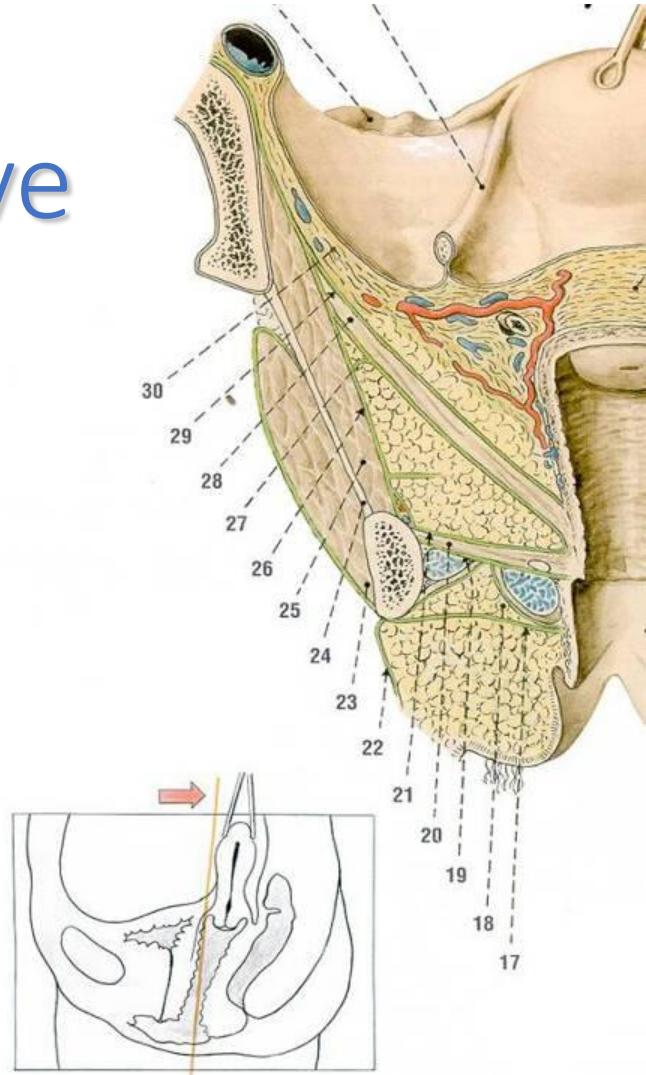


Fascie hráze



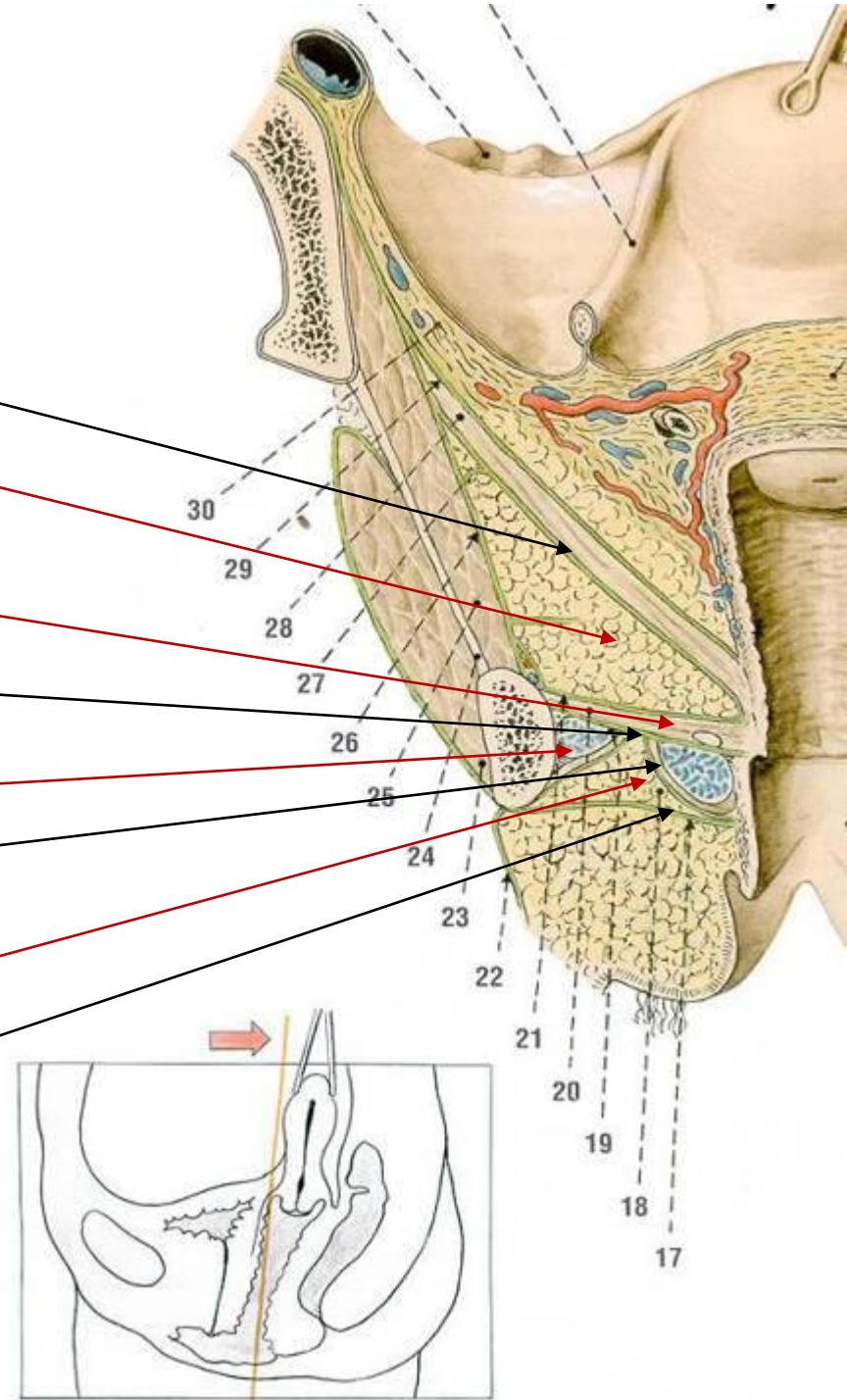
Prostory ženské malé pánve

- saccus subcutaneus perinei
 - tukové vazivo podkoží
- compartmentum / spatium superficiale perinei
 - crura clitoridis + mm. ischiocavernosi, bulbi vestibuli + mm. bulbospongiosi, mm. transversi perinei superficiales
- saccus profundus / spatium profundum perinei
 - membrana perinei, 3 svaly močové trubice
- recessus pubicus fossae ischioanalnis

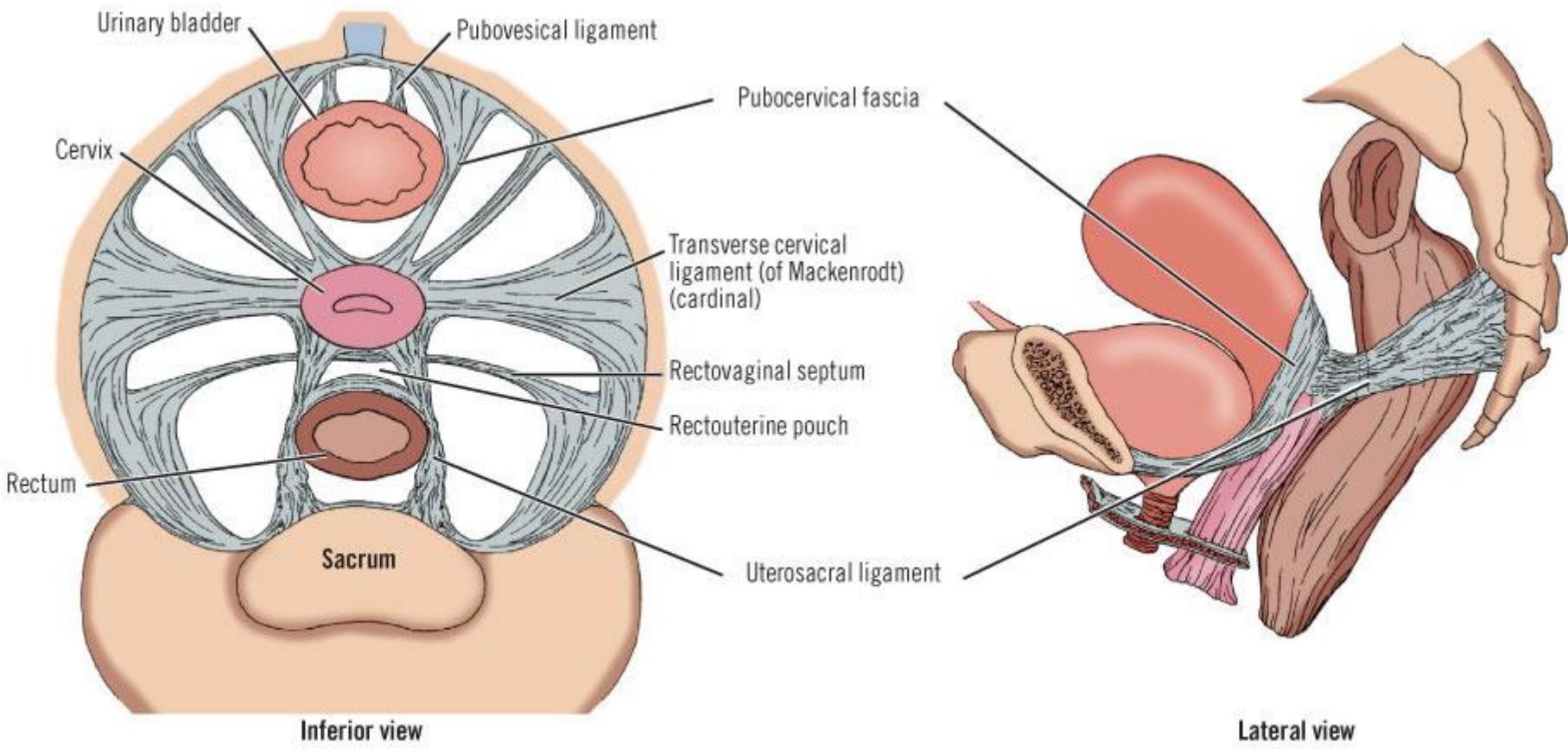


Fascie a prostory ženské malé pánve

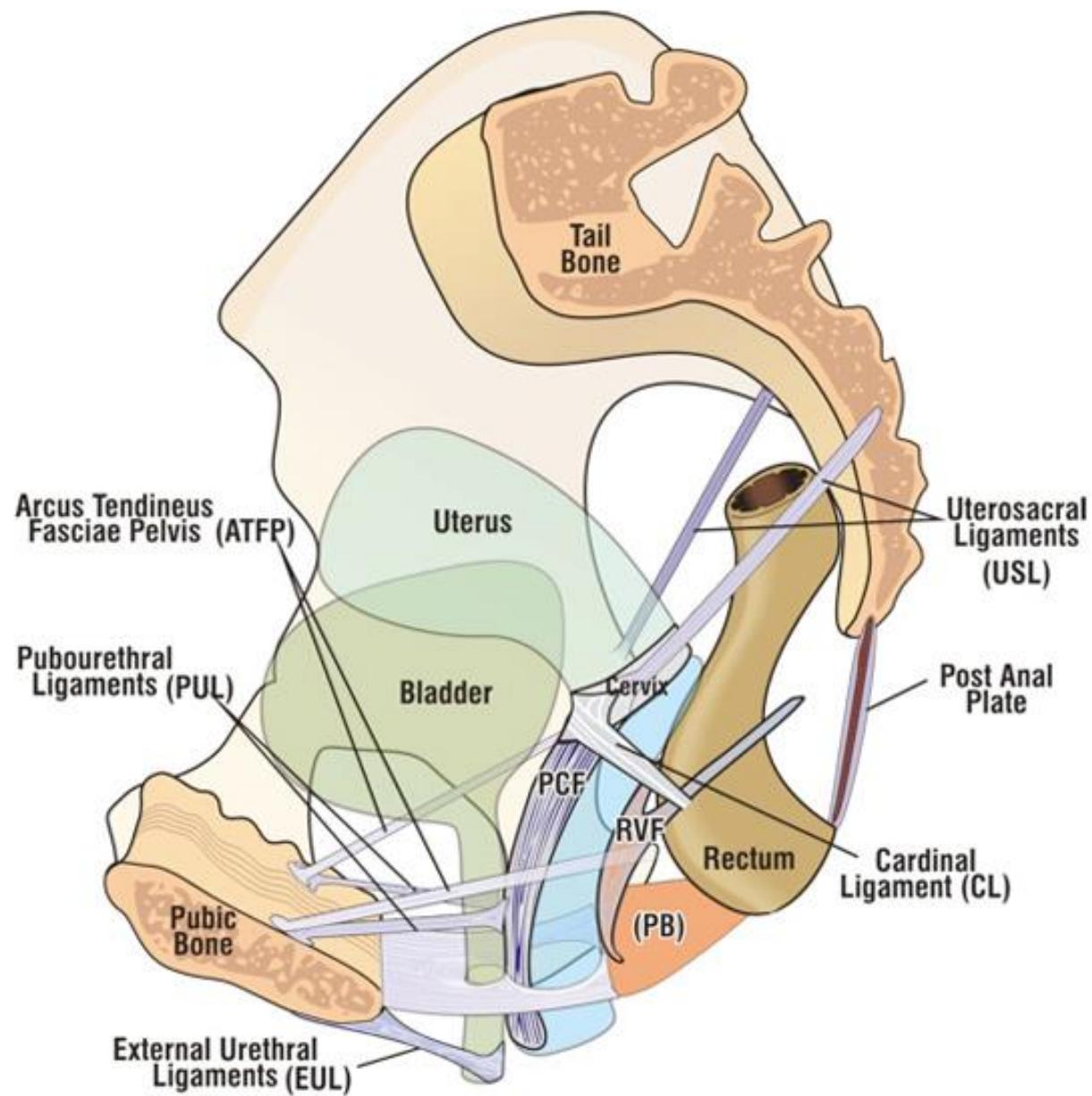
- fascia diaphragmatis pelvis inferior
- recessus pubicus fossae ischioanalis
- saccus profundus perinei
- membrana perinei
- compartmentum superficiale perinei
- fascia perinei
- saccus subcutaneus perinei
- stratum membrinosum telae subcutaneae

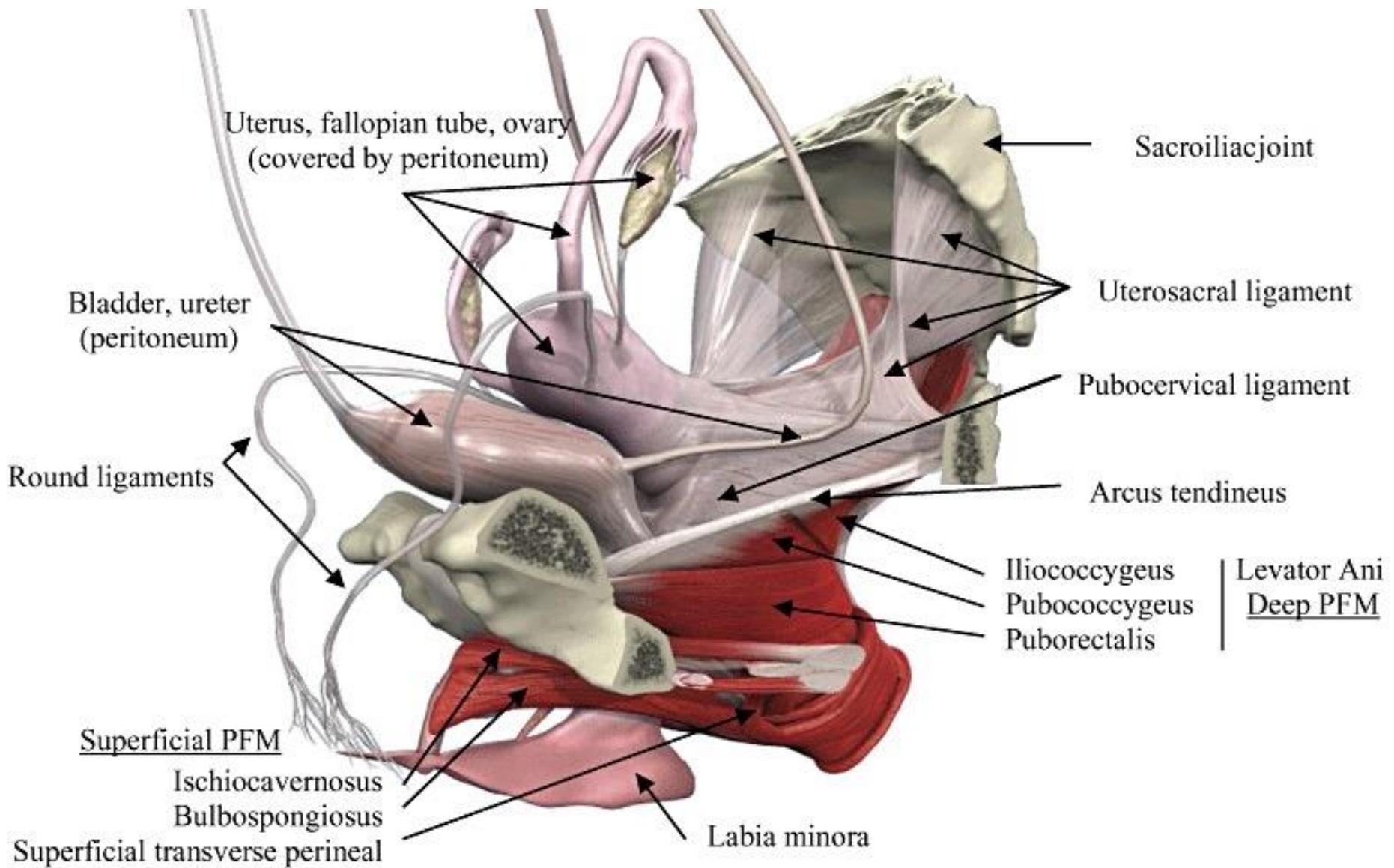


Vazivové pruhy



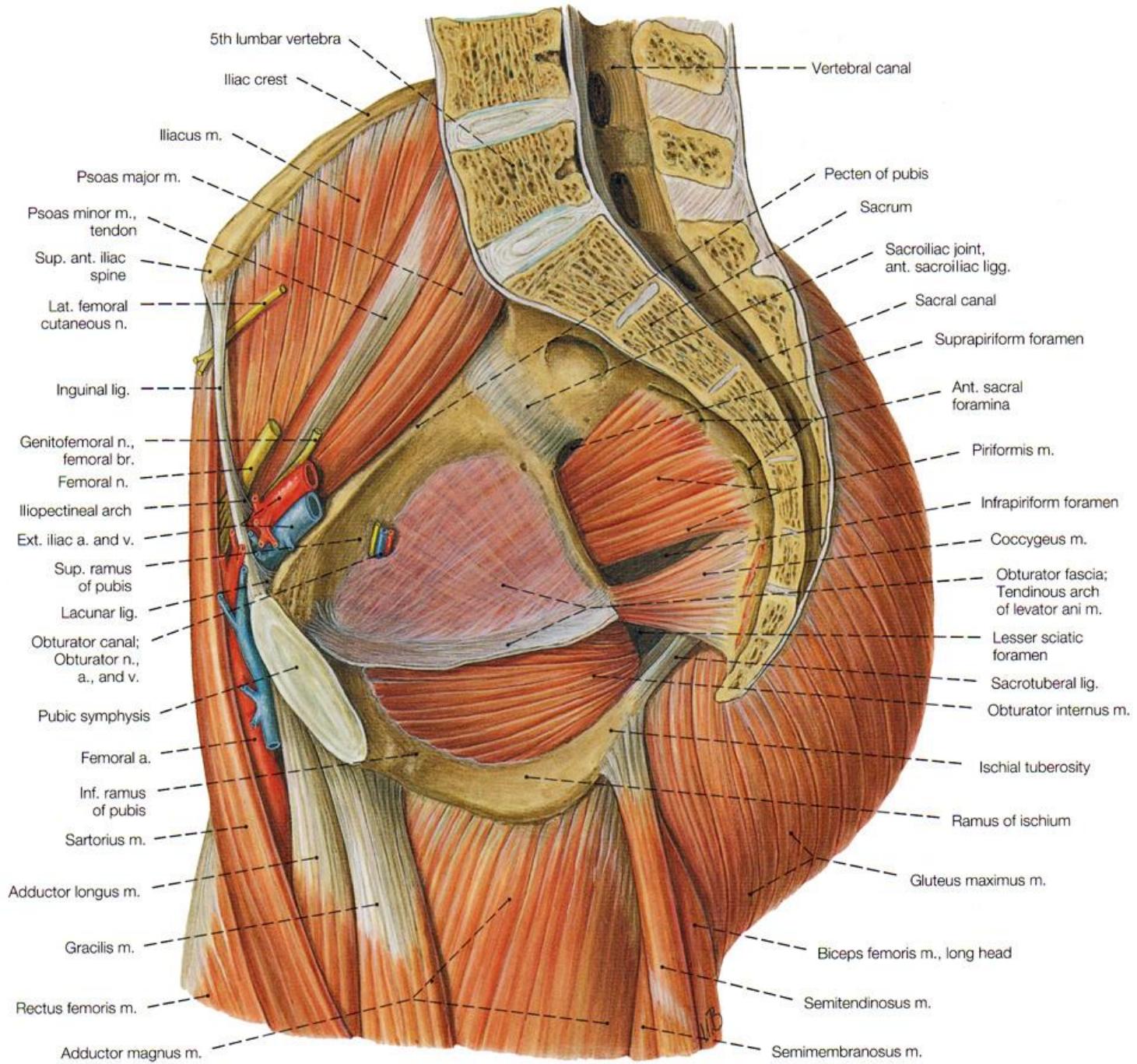
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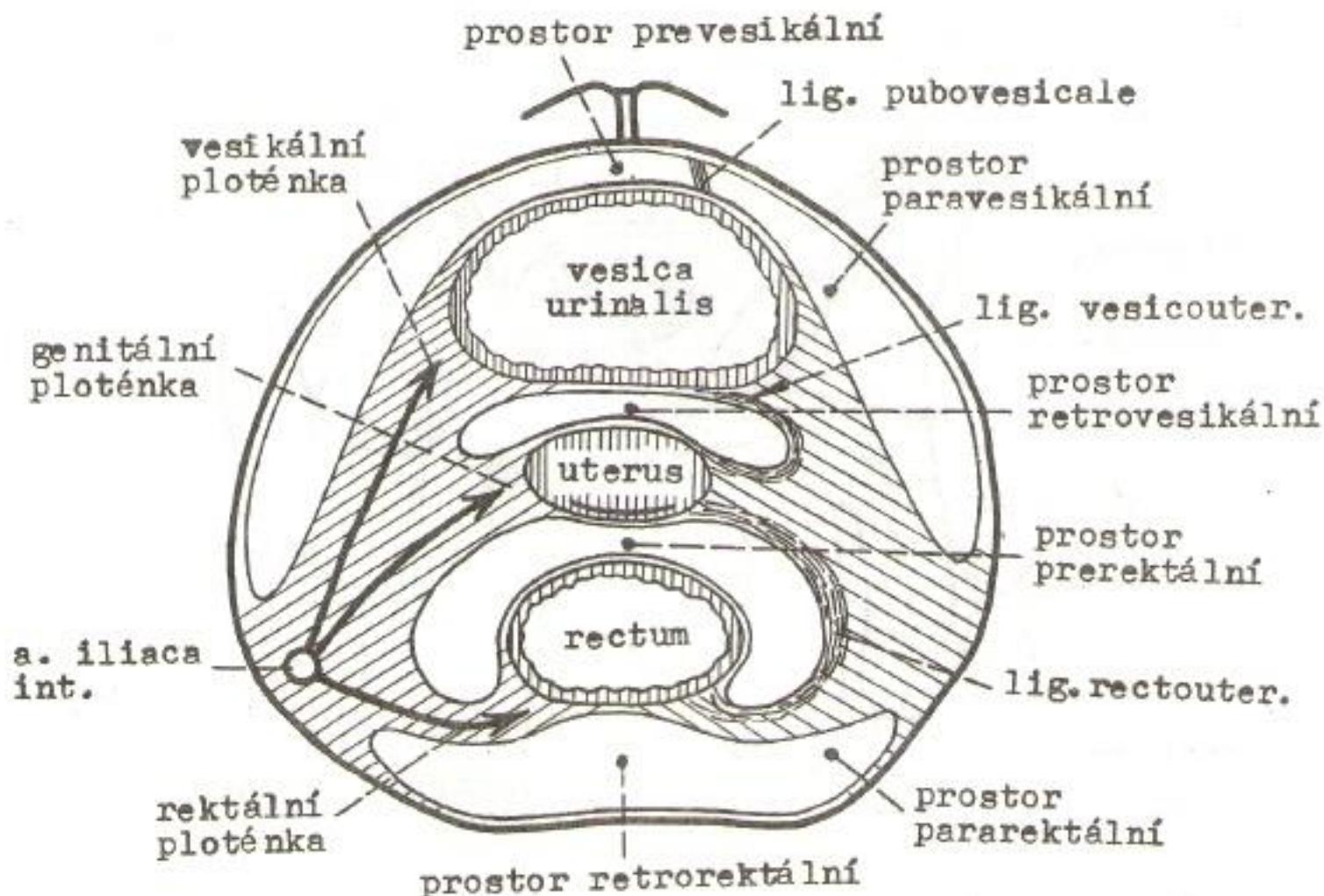




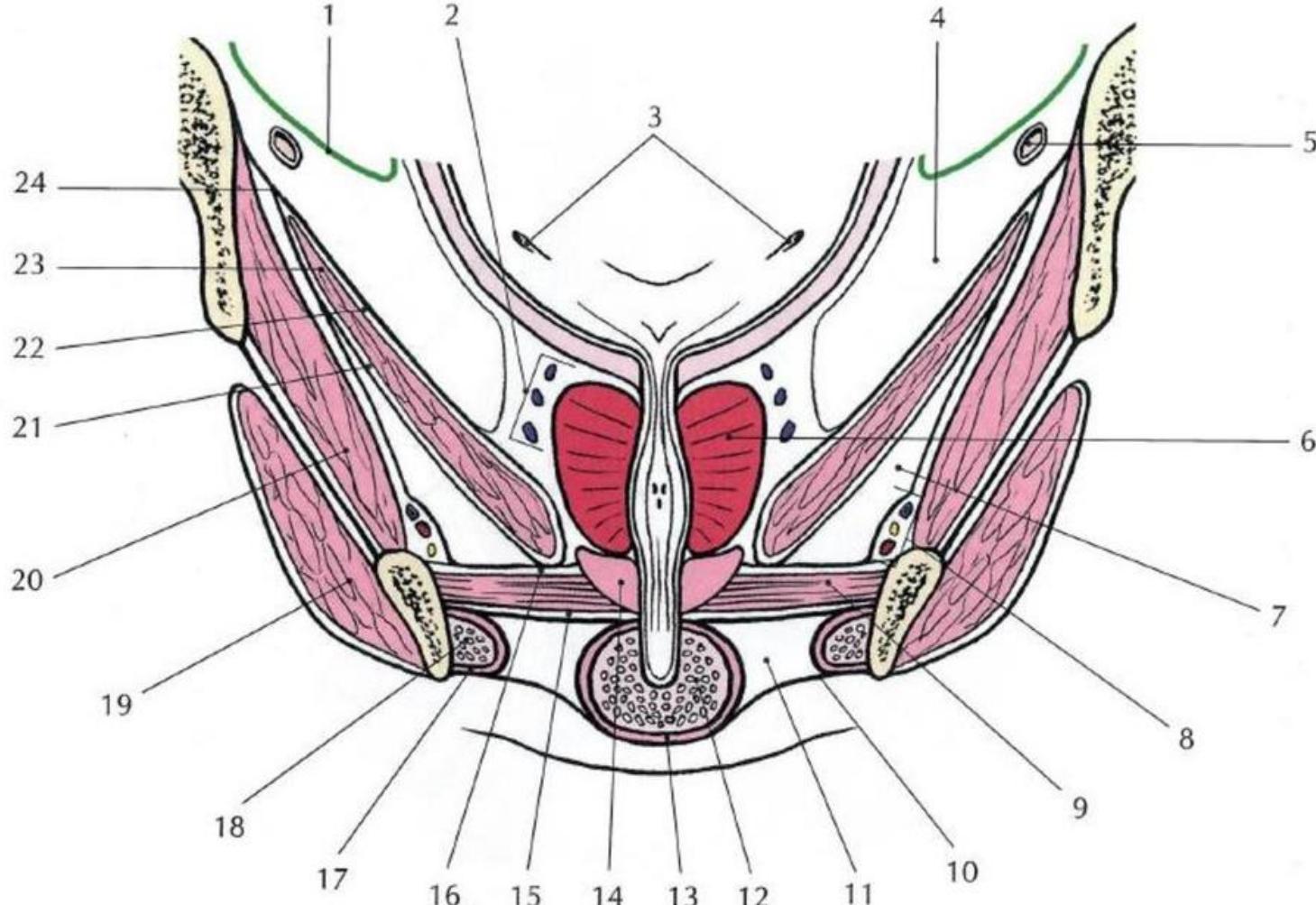
Fascie pánevní dutiny

- fascia pelvis parietalis (fascia endopelvica)
 - fascia obturatoria
 - fascia diaphragmatis pelvis superior
 - na os sacrum bez zvláštního jména (FPP)
- fascia pelvis visceralis
 - arcus tendineus fasciae pelvis
 - lamina vesicalis (anterior pillar) = pokračuje jako fascia vesicoumbilicalis
 - lamina genitalis (middle pillar) = fascia rectoprostatica/rectovesicalis
 - lamina rectalis (posterior pillar) = fascia perirectalis



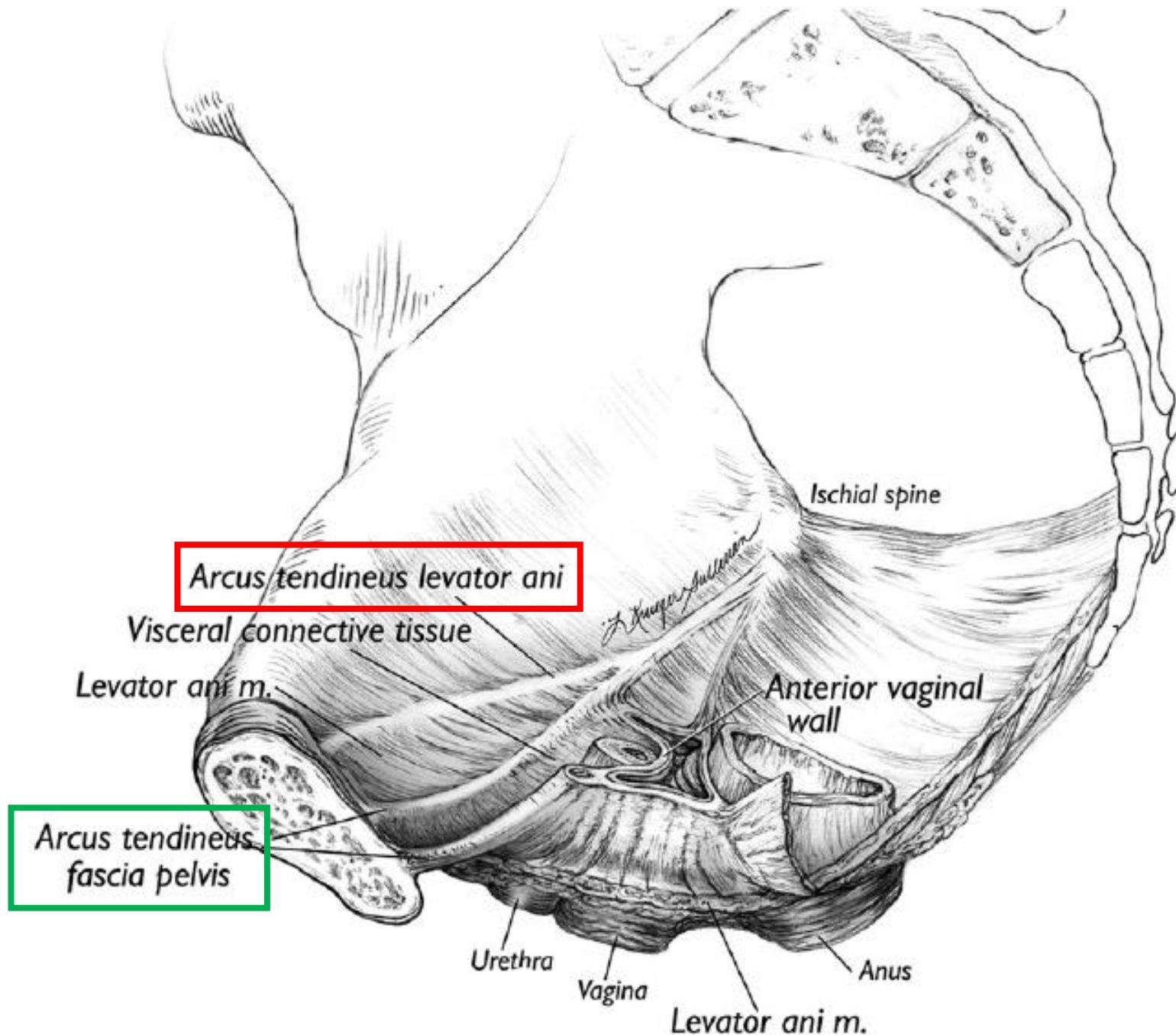


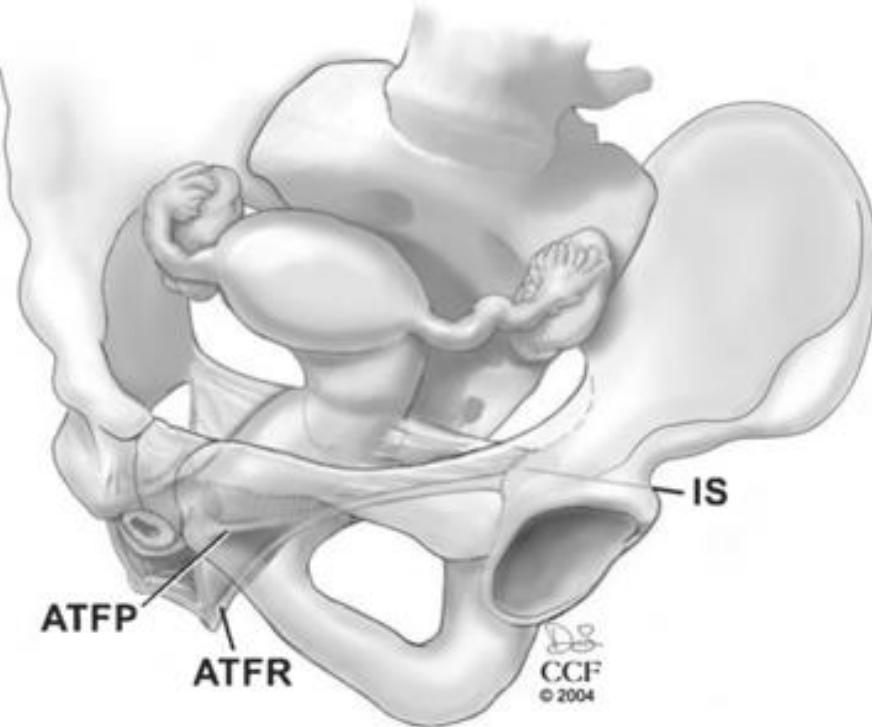
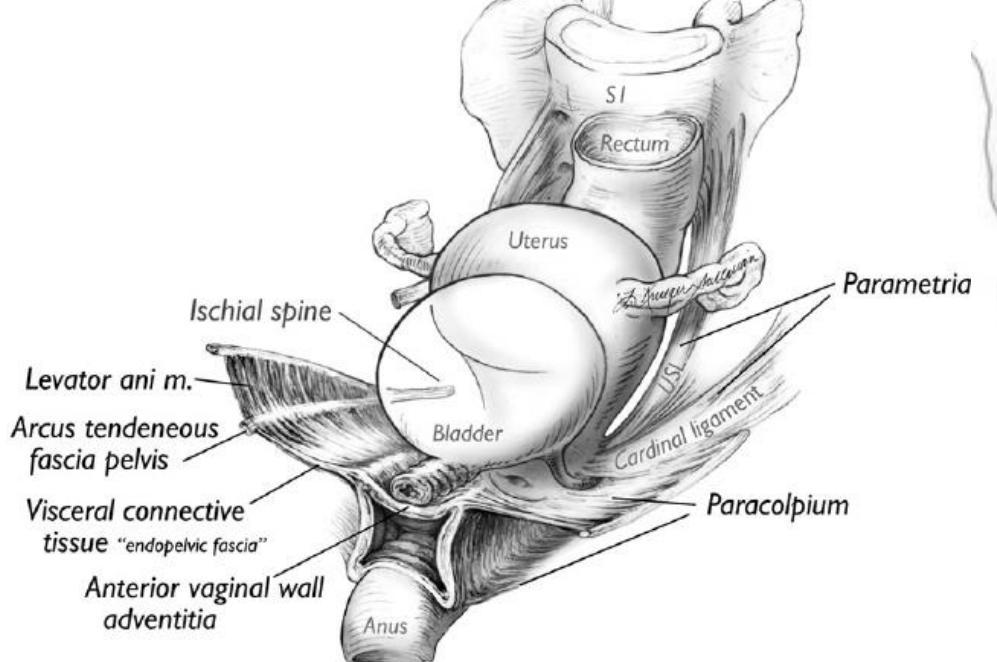
Obr. 66. Členění infraperitoneálního prostoru pánve.
Schema. (Zjednodušeno podle Pernkopfa).



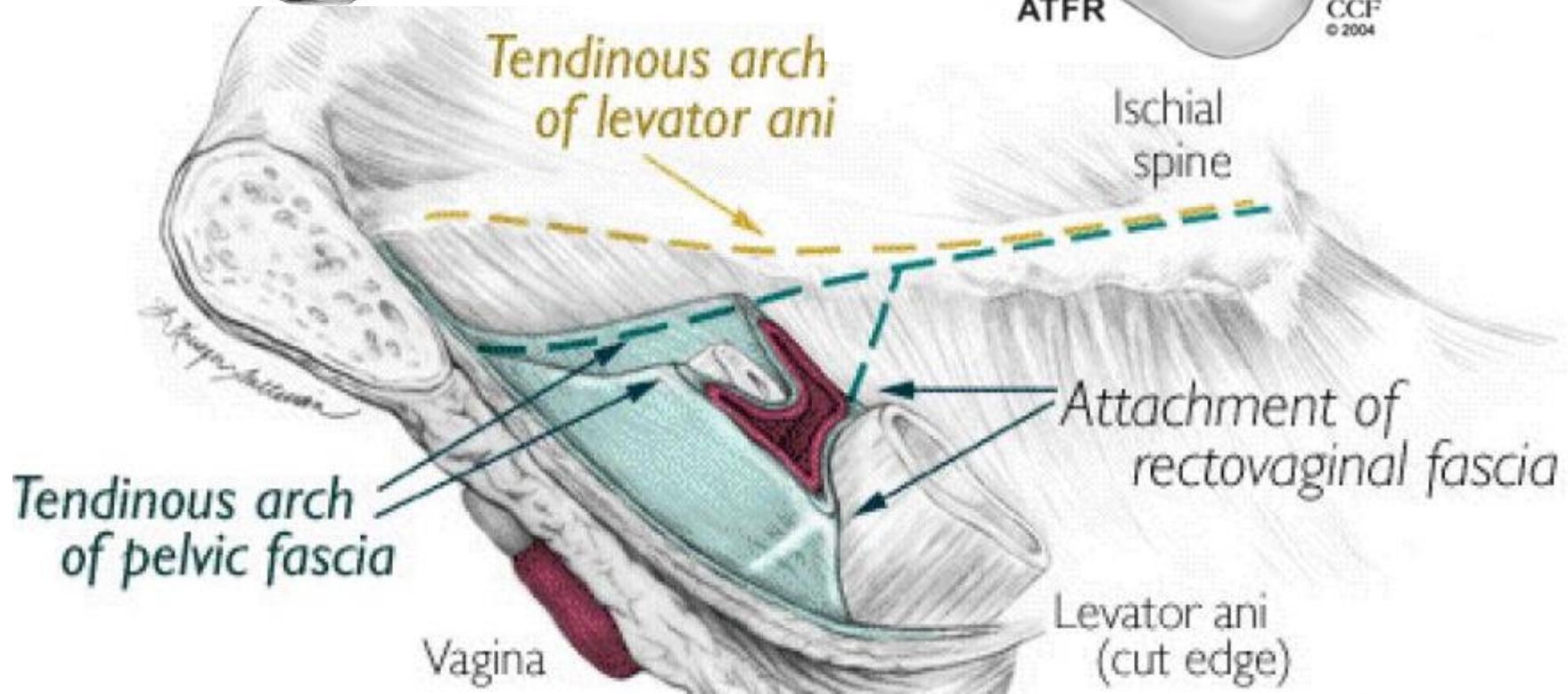
Obr. 14.11. Prostory a fascie malé pánve (frontální řez mužskou pánví)

- 1 – peritoneum
- 2 – plexus venosus prostaticus
- 3 – ostium uretherum int.
- 4 – paracystium
- 5 – ductus deferens
- 6 – prostata
- 7 – fossa ischiorectal
- 8 – vasa pudenda int. a n. pudendus v Alcockově kanále
- 9 – diaphragma urogenitale
- 10 – fascia perinei superficialis
- 11 – spatium perinei superficiale
- 12 – bulbus penis
- 13 – m. bulbospongiosus
- 14 – m. sphincter urethrae ext.
- 15 – fascia diaphragmatis urogenitalis inferior
- 16 – fascia diaphragmatis urogenitalis superior
- 17 – m. ischiocavernosus
- 18 – crus penis
- 19 – m. obturatorius ext.
- 20 – m. obturatorius int.
- 21 – fascia diaphragmatis pelvis inferior
- 22 – fascia diaphragmatis pelvis superior
- 23 – m. levator ani
- 24 – arcus tendineus m. levatoris ani

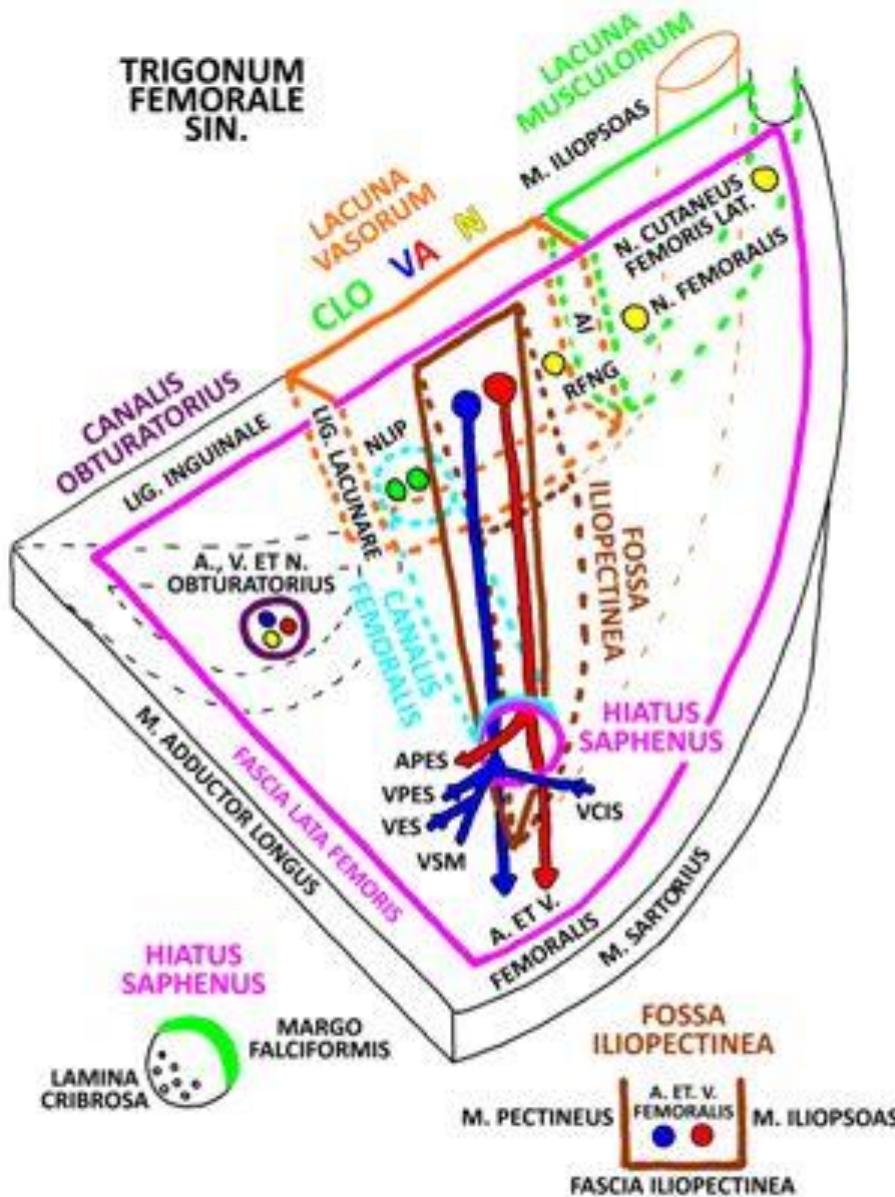




Tendinous arch of levator ani



TRIGONUM
FEMORALE
SIN.



NLIP = NODI LYMPHOIDEI INGUINALE PROUNDI

AI = ARCUS ILOPECTINEUS

RFNG = R. FEMORALIS N. GENITO FEMORALIS

APES = A. PUDENDA EXTERNA SUPERFICIALIS

VPES = V. PUDENDA EXTERNA SUPERFICIALIS

VES = V. EPIGASTRICA SUPERFICIALIS

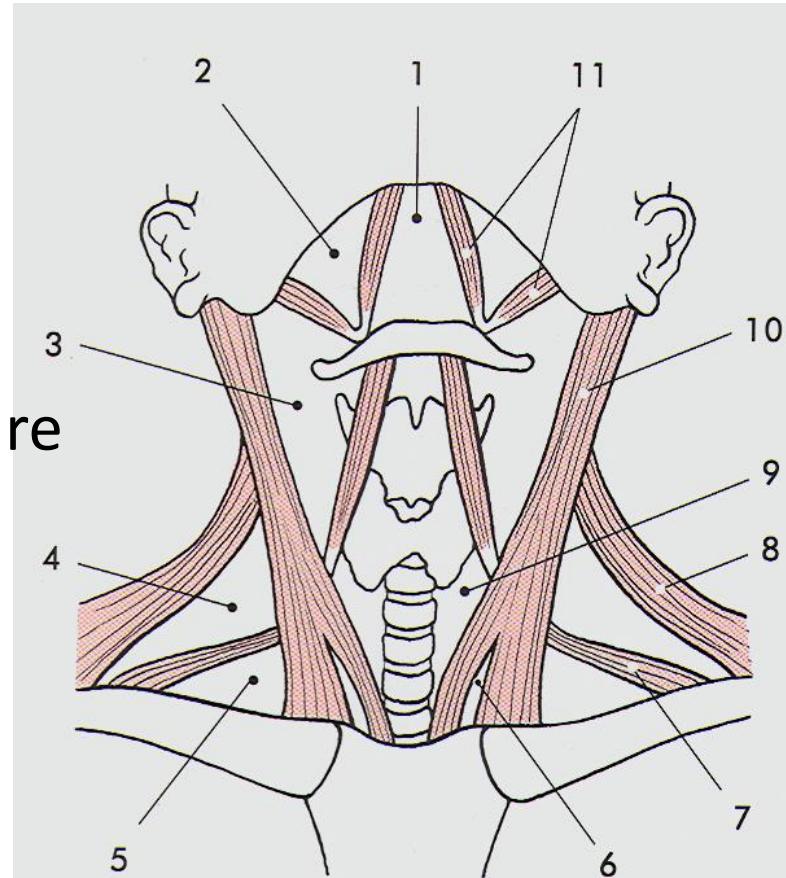
VSM = V. SAPHENA MAGNA

VCIS = V. CIRCUMFLEXA ILIUM SUPERFICIALIS

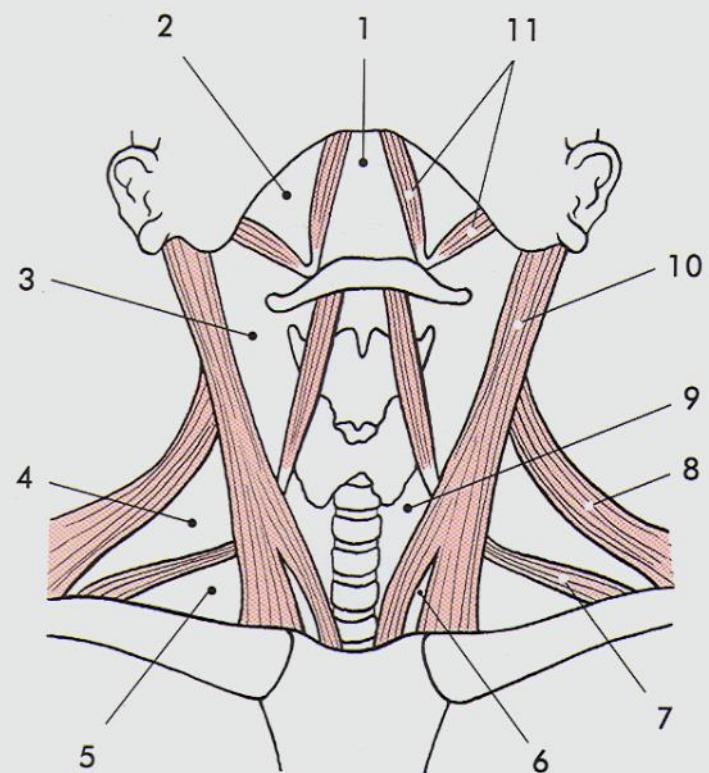
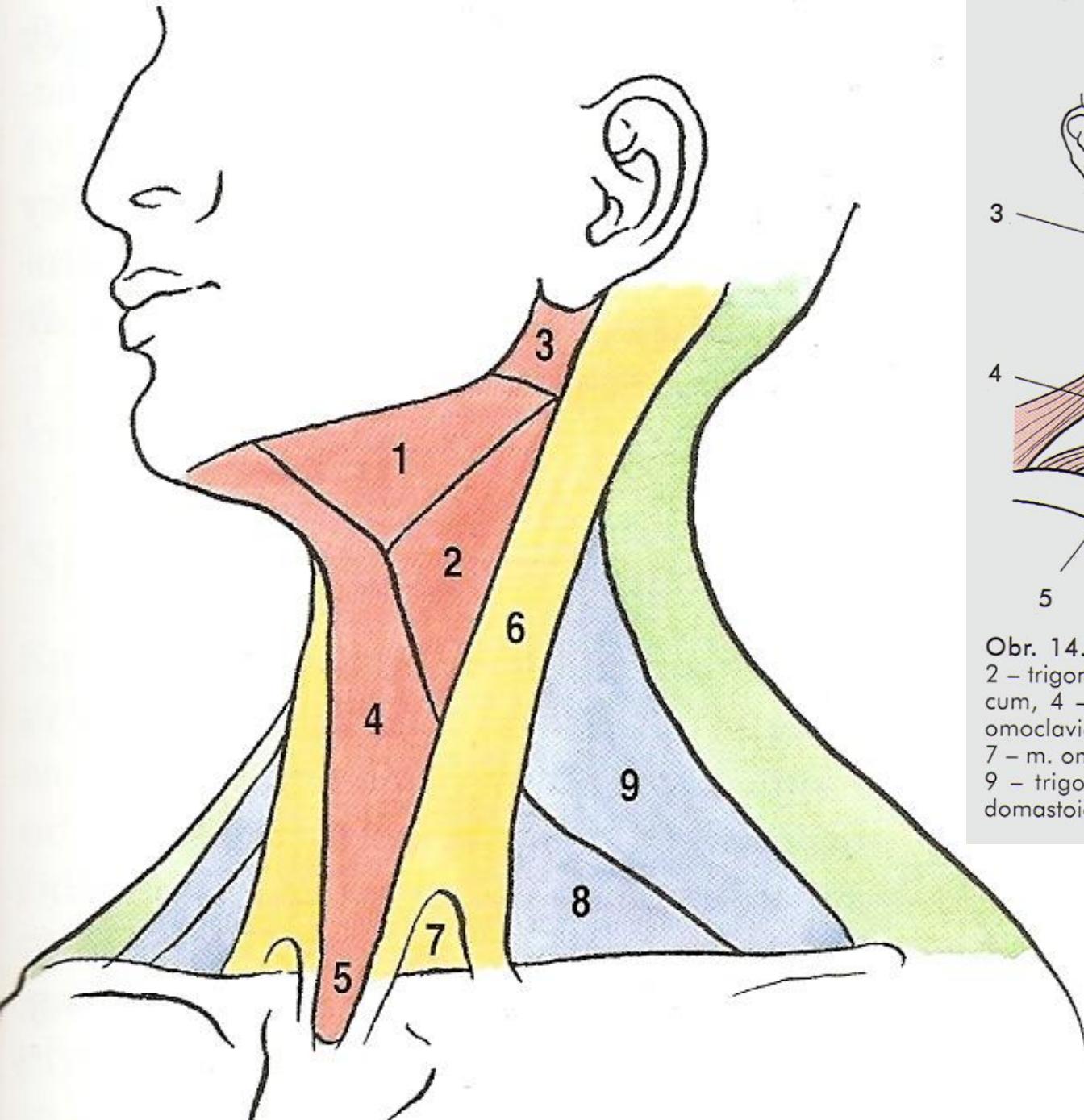
Topografie krku

Trojúhelníky na krku

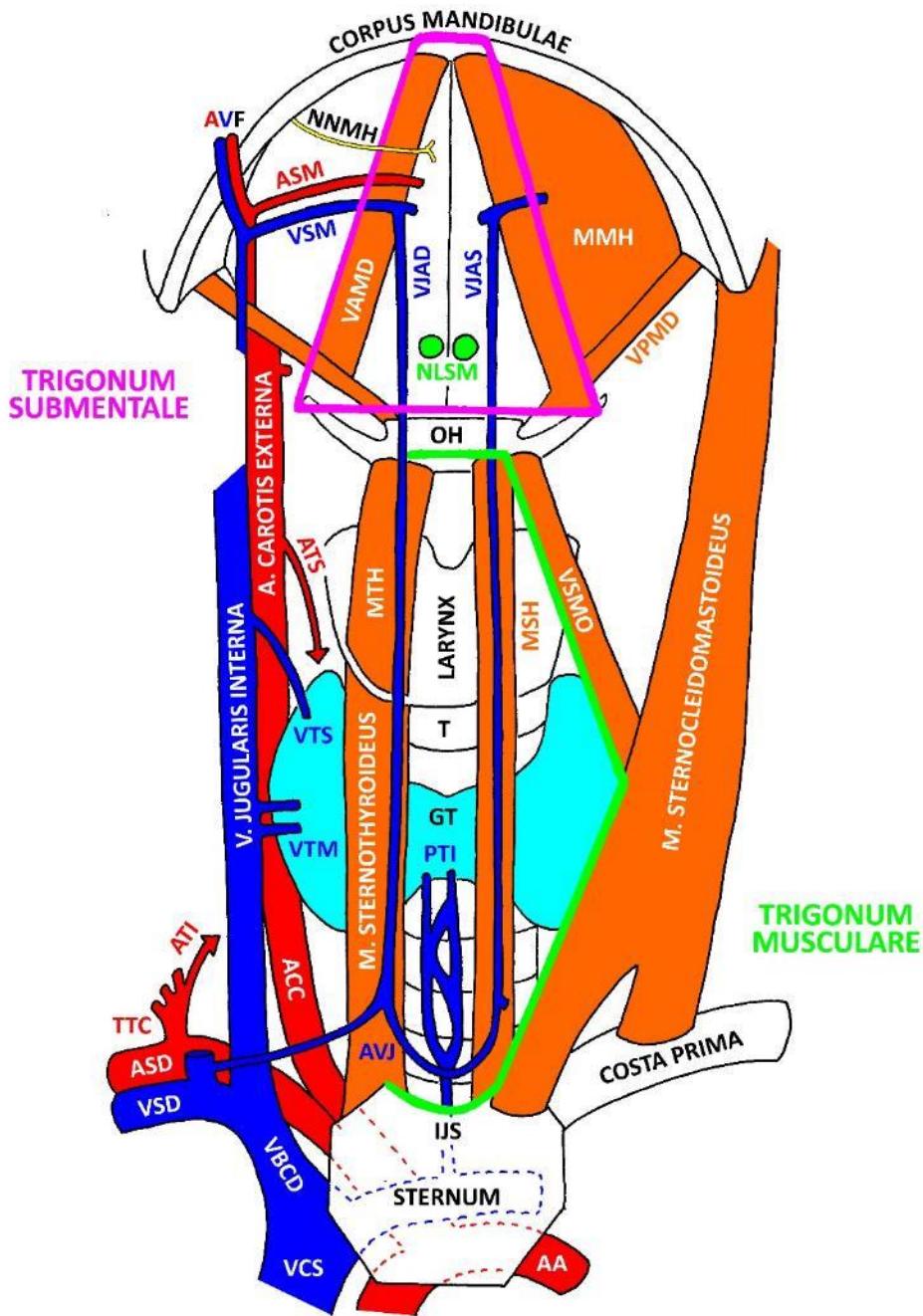
- **regio colli anterior**
 - trigonum submandibulare
 - trigonum submentale
 - trigonum caroticum (*Malgaignei*)
 - trigonum omotracheale = musculare
- **regio colli lateralis**
 - trigonum omoclaviculare
 - trigonum omotrapezium
 - fossa supraclavicularis minor
 - fissura scalenorum
 - trigonum scalenovertebrale



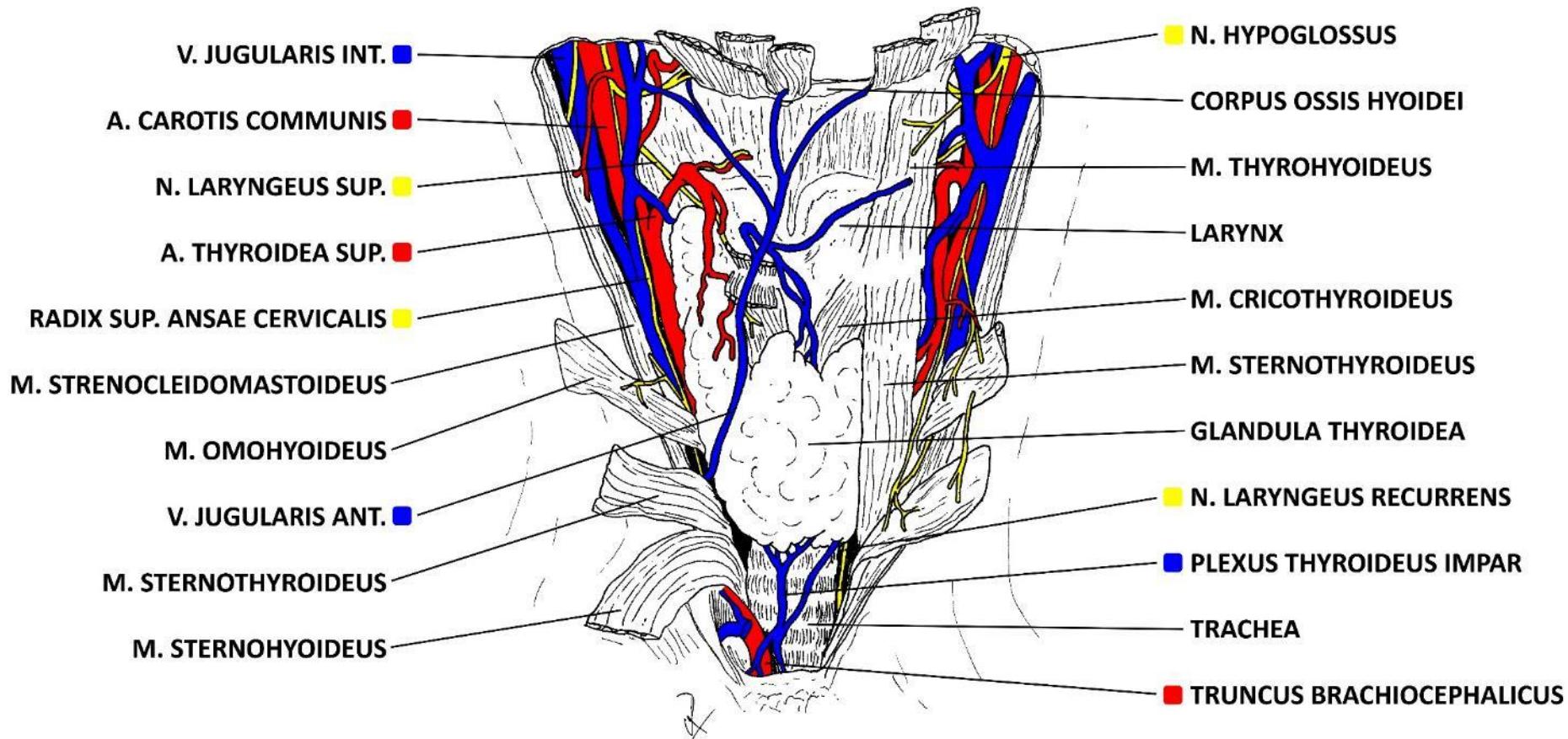
Obr. 14.1. Krajiny krční. 1 – regio submental, 2 – trigonum submandibulare, 3 – trigonum caroticum, 4 – trigonum omotrapezium, 5 – trigonum omoclaviculare, 6 – fossa supraclavicularis minor, 7 – m. omohyoideus, dolní bříško, 8 – m. trapezius, 9 – trigonum omotracheale, 10 – m. sternocleidomastoideus, 11 – m. digastricus

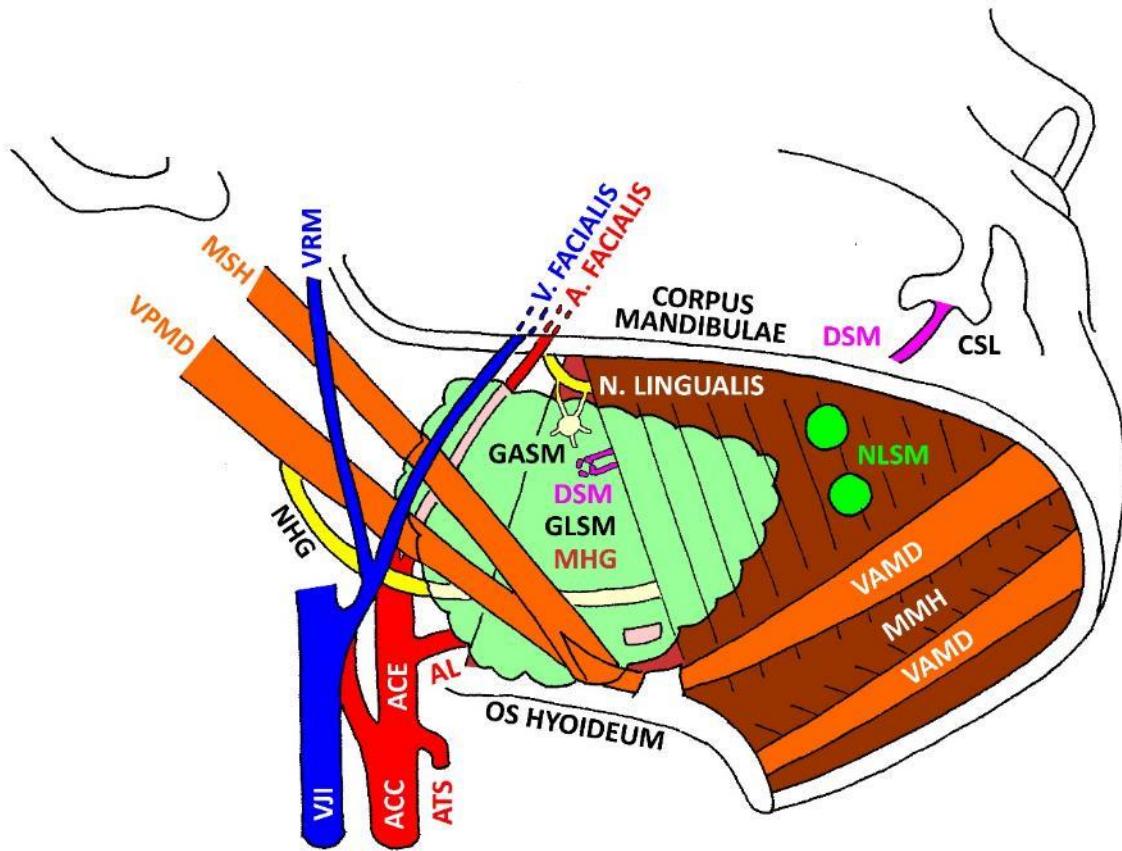


Obr. 14.1. Krajiny krční. 1 – regio submental, 2 – trigonum submandibulare, 3 – trigonum caroticum, 4 – trigonum omotrapezium, 5 – trigonum omoclaviculare, 6 – fossa supraclavicularis minor, 7 – m. omohyoideus, dolní bříško, 8 – m. trapezius, 9 – trigonum omotracheale, 10 – m. sternocleidomastoideus, 11 – m. digastricus

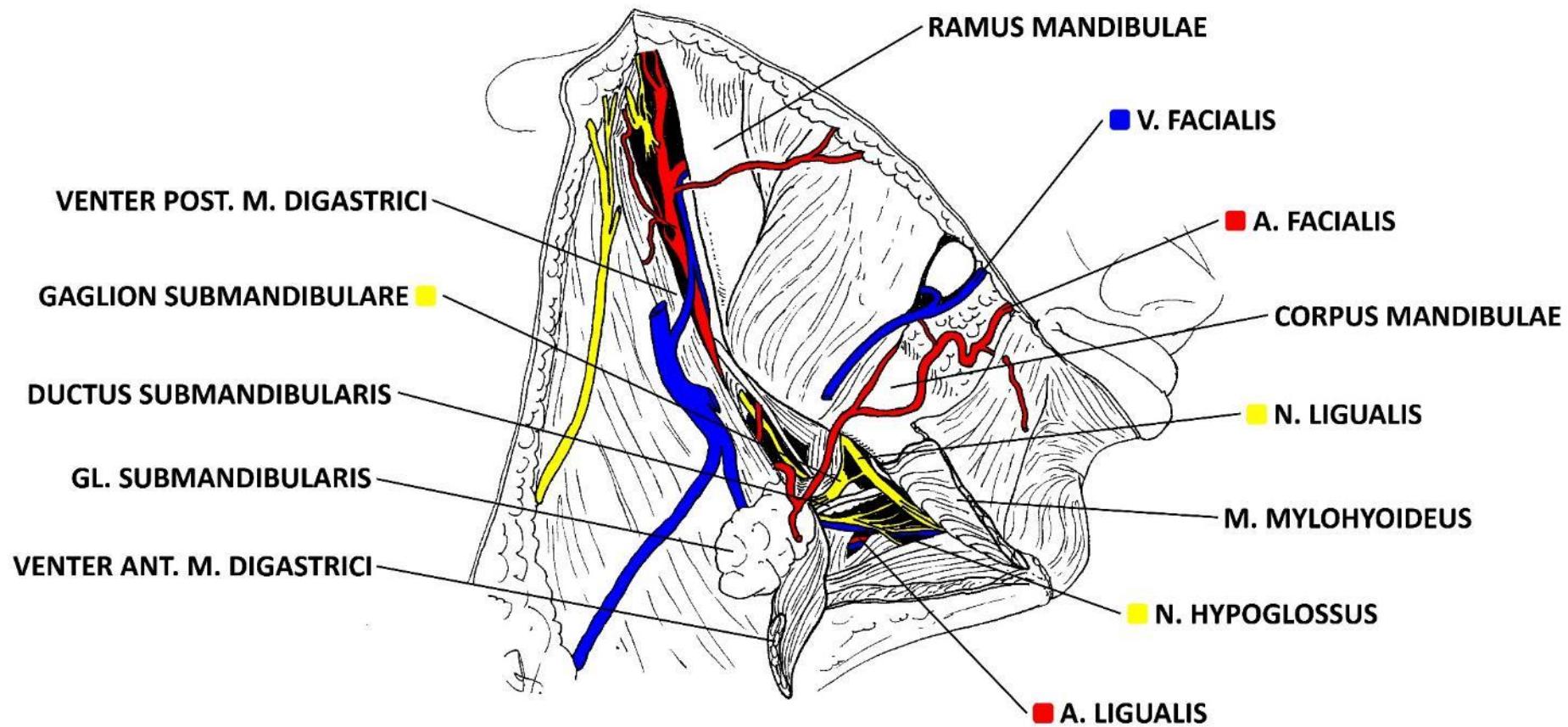


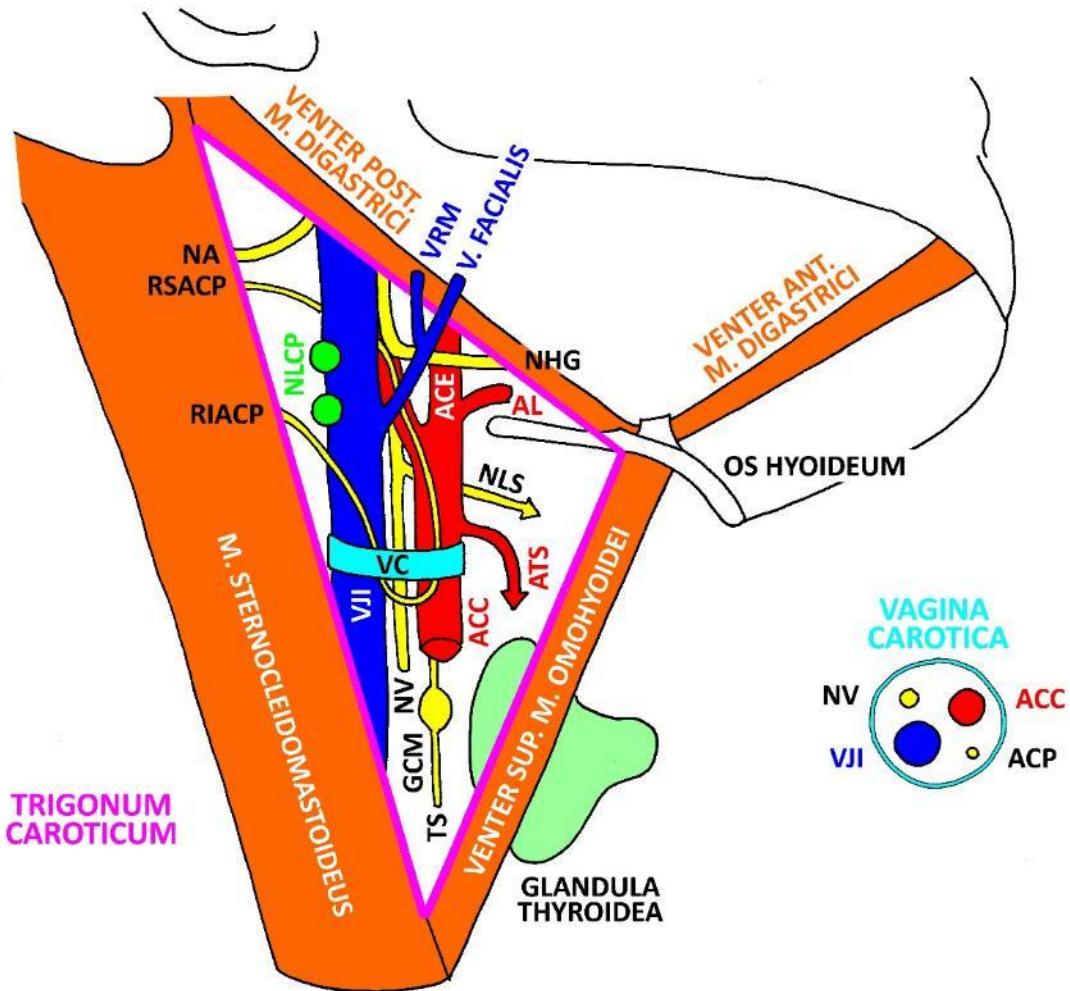
AVF - A. ET V. FACIALIS
NNMH - NN. MYLOHYOIDEI
ASM - A. SUBMENTALIS
VSM - V. SUBMENTALIS
VAMD - VENTER ANT. M. DIGASTRICI
VJAD - V. JUGULARIS ANT. DX.
VJAS - V. JUGULARIS ANT. SIN.
NLSM - N. L. SUBMENTALES
MMH - M. MYLOHYOIDEUS
VPMD - VENTER POST. M. DIGASTRICI
OH - OS HYOIDEUM
ATS - A. THYROIDEA SUP.
MTH - M. THYROHYOIDEUS
MSH - M. STERNOHYOIDEUS
VSMO - VENTER SUP. M. OMOHYOIDEI
T - TRACHEA
VTS - V. THYROIDEA SUP.
VTM - V. THYROIDEA MEDIA
GT - GLANDULA THYROIDA
PTI - PLEXUS THYROIDEUS IMPAR
ACC - A. CAROTIS COMMUNIS
AVJ - ARCUS VENOSUS JUGULI
IJS - INCISURA JUGULARIS STERNI
ATI - A. THYROIDEA INF.
TTC - TRUNCUS THYROCERVICALIS
ASD - A. SUBCLAVIA DX.
VSD - V. SUBCLAVIA DX.
BCD - V. BRACHIOCEPHALICA DX.
VCS - V. CAVA SUP.
AA - ARCUS AORTAE





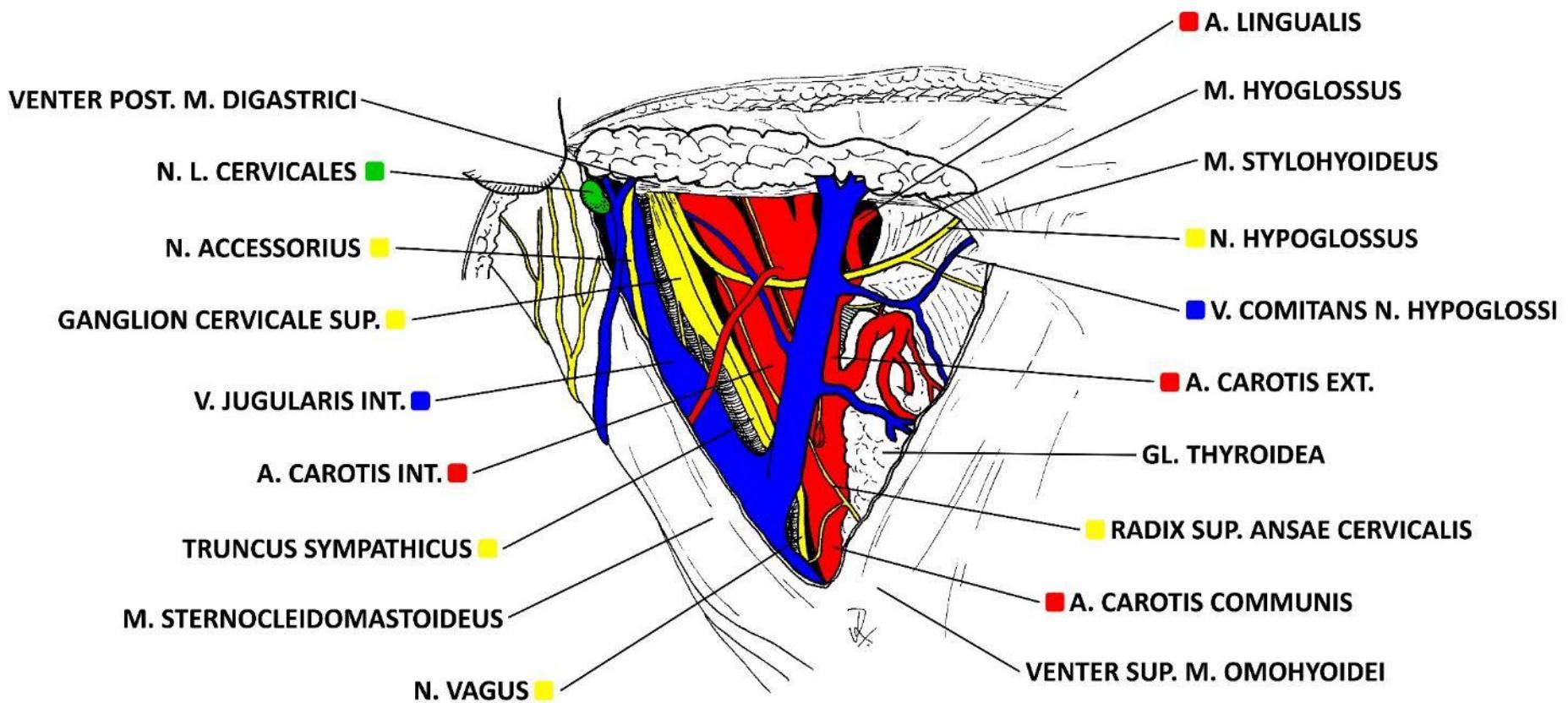
VRM - V. RETROMANDIBULARIS
MSH - M. STYLOHYOIDEUS
VPM - VENTER POST. M. DIGASTRICI
NHG - N. HYPOGLOSSUS
GASM - GANGLION SUBMANDIBULARE
DSM - DUCTUS SUBMANDIBULARIS
GLSM - GLANDULA SUBMANDIBULARIS
MHG - M. HYOGLOSSUS
AL - A. LIGUALIS
ACE - A. CAROTIS EXTERNA
VII - V. JUGULARIS INTERNA
ACC - A. CAROTIS COMMUNIS
ATS - A. THYROIDEA SUP.
CSL - CARUNCULA SUBLINGUALIS
NLSM - N. L. SUBMANDIBULARES
VAMD - VENTER ANT. M. DIGASTRICI
MMH - M. MYLOHYOIDEUS

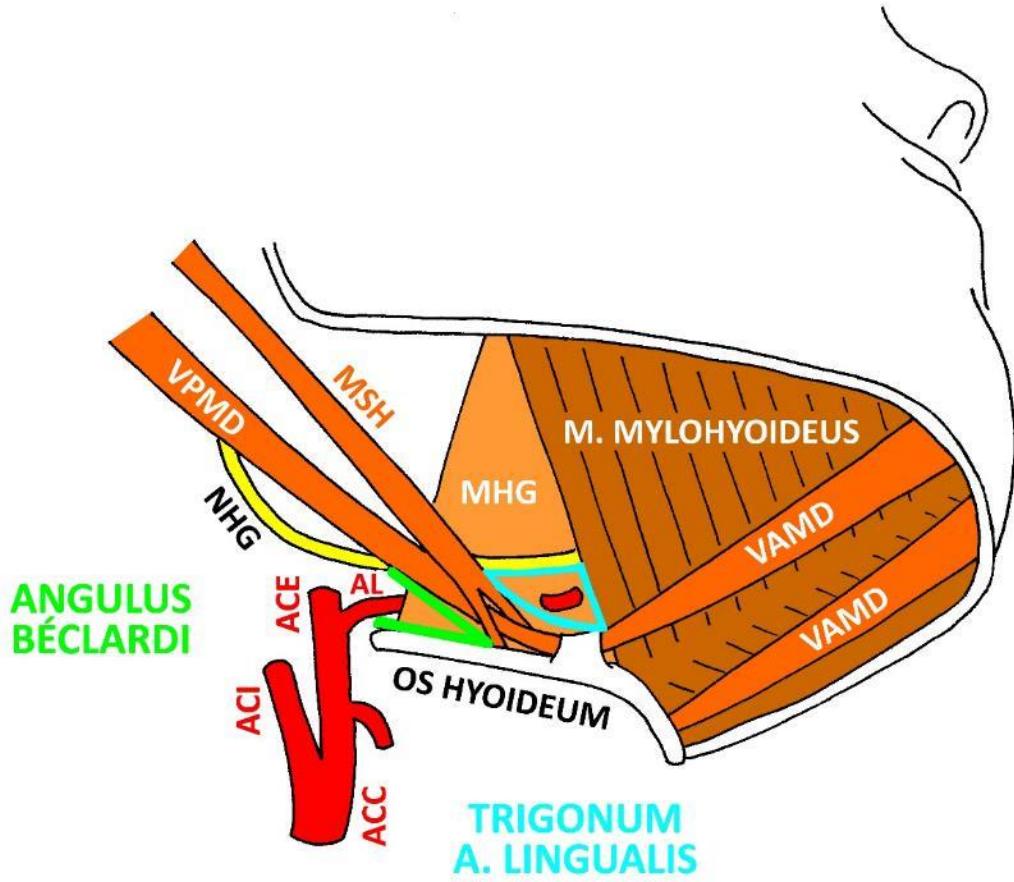




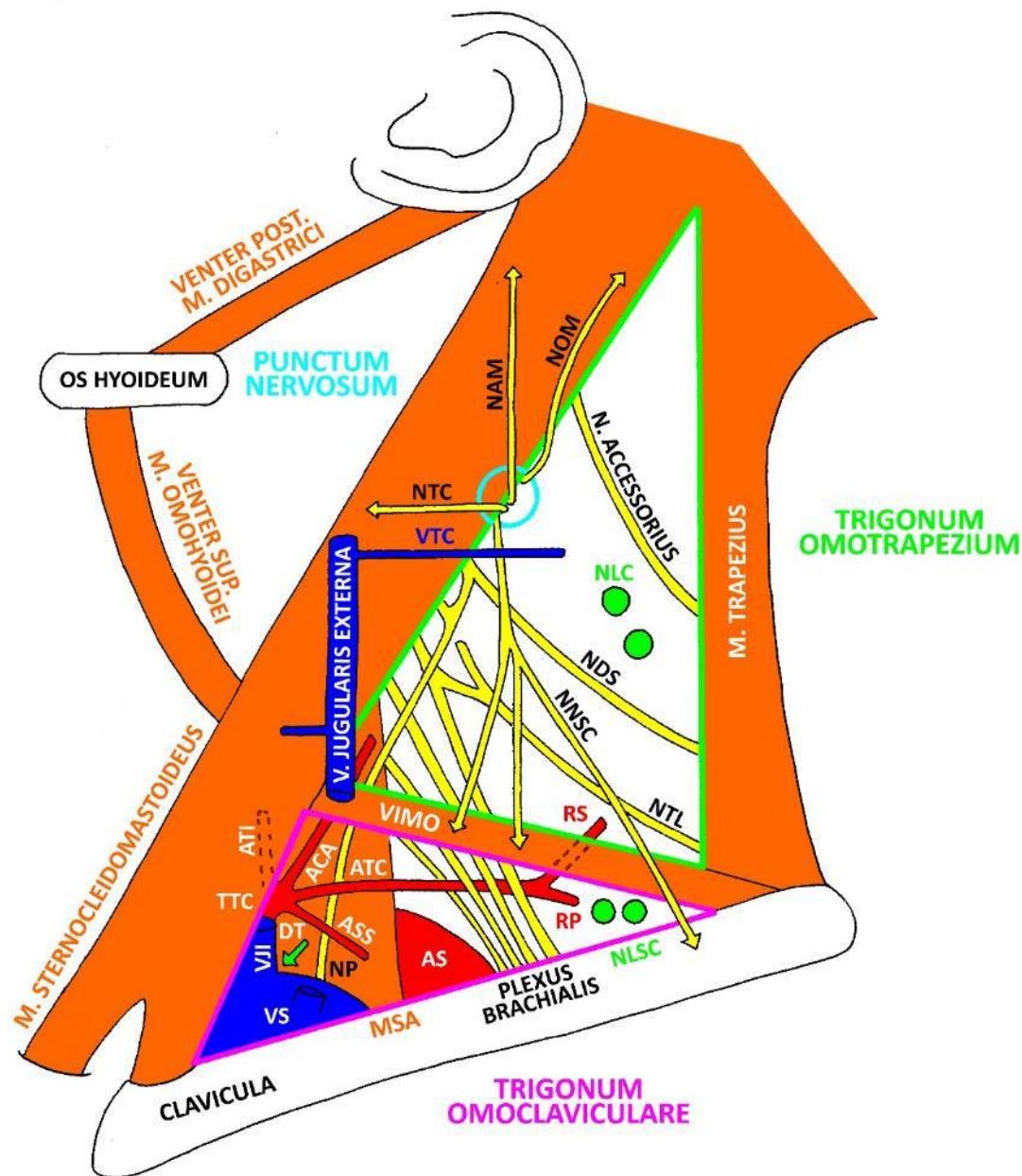
NA - N. ACCESSORIUS
RSACP - RADIX SUP. ANSÆ CERVICALIS PROFUNDAE
RIACP - RADIX INF. ANSÆ CERVICALIS PROFUNDAE
NLCP - N. L. CERVICALES PROFUNDI
VRM - V. RETROMANDIBULARIS
ACE - A. CAROTIS EXTERNA
NHG - N. HYPOGLOSSUS
AL - A. LINGUALIS
NLS - N. LARYNGEUS SUP.
VC - Vagina CAROTICA
VJI - V. JUGULARIS INTERNA
ACC - A. CAROTIS COMMUNIS
ATS - A. THYROIDEA SUP.
NV - N. VAGUS
GCM - GANGLION CERVICALE MEDIUM
TS - TRUNCUS SYMPATHICUS
ACP - ANSA CERVICALIS PROFUNDA



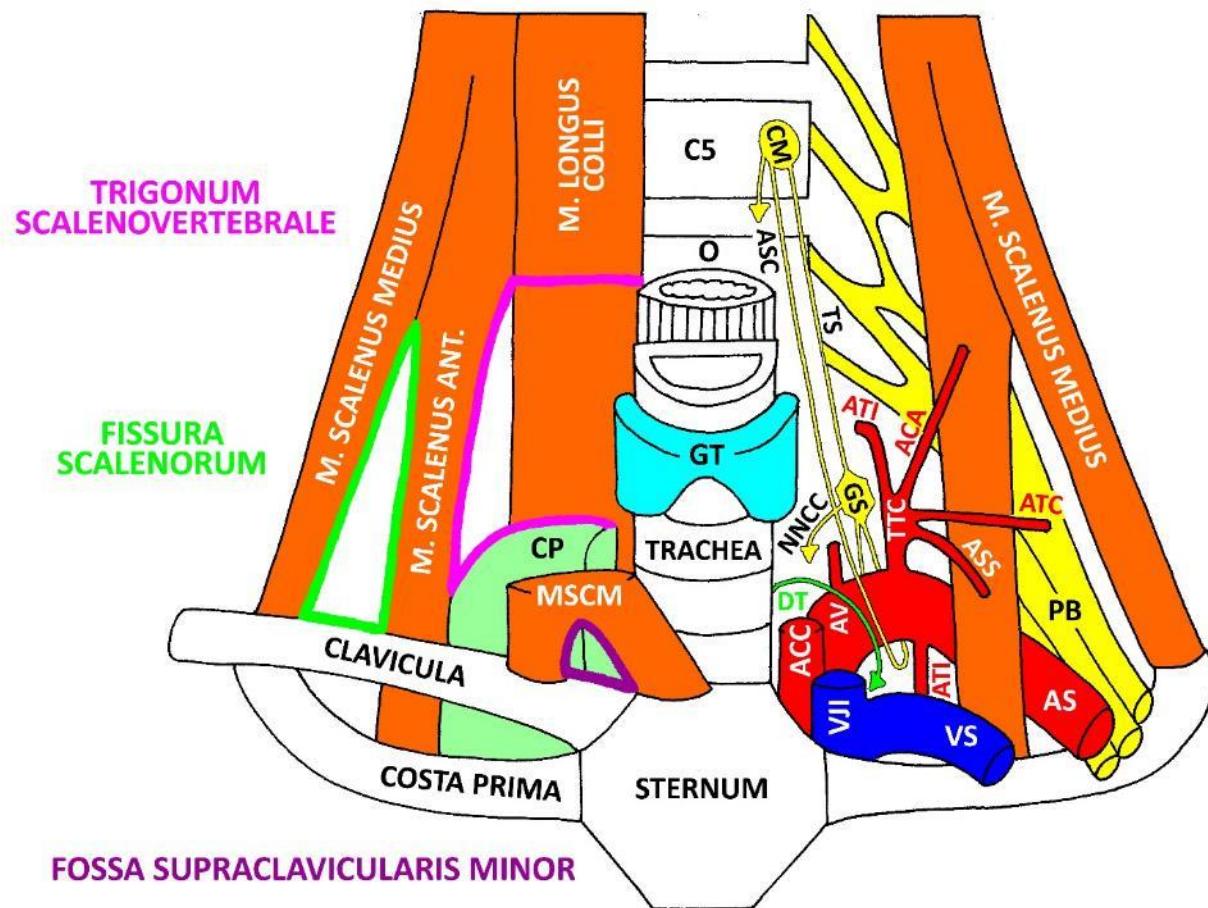




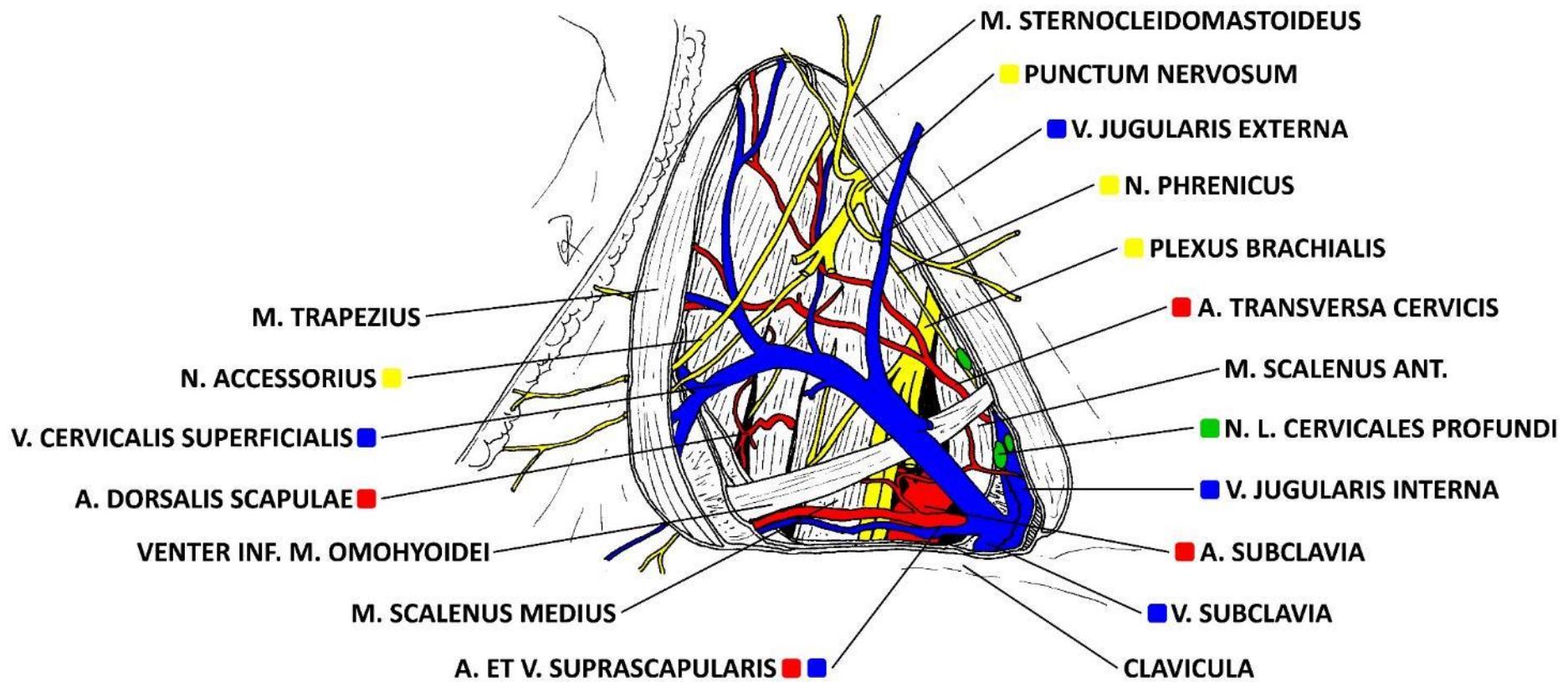
VPMD - VENTER POST. M. DIGASTRICI
NHG - N. HYPOGLOSSUS
MSH - M. STYLOHYOIDEUS
MHG - M. HYOGLOSSUS
ACE - A. CAROTIS EXTERNA
AL - A. LIGUALIS
ACI - A. CAROTIS INTERNA
ACC - A. CAROTIS COMMUNIS
VAMD - VENTER ANT. M. DIGASTRICI



NOM - N. OCCIPITALIS MINOR
NAM - N. AURICULARIS MAGNUS
NTC - N. TRANSVERSUS CERVICIS
VTC - V. TRANSVERSA CERVICIS
NLC - N. L. CERVICALES
NDS - N. DORSALIS SCAPULAE
NNSC - NN. SUPRACLAVICULARES
NTL - N. THORACICUS LONGUS
VIMO - VENTER INF. M. OMOHYOIDEI
RS - R. SUPERFICIALIS (A. TRANSVERSAE CERVICIS)
TTC - TRUNCUS THYROCEVICALIS
ATI - A. THYROIDEA INF.
ACA - A. CERVICALIS ASCENDENS
ATC - A. TRANSVERSA CERVICIS
RP - R. PROFUNDUS (A. TRANSVERSAE CERVICIS)
ASS - A. SUPRASCAPULARIS
VJI - V. JUGULARIS INTERNA
DT - DUCTUS THORACICUS
VS - V. SUBCLAVIA
NP - N. PHRENICUS
AS - A. SUBCLAVIA
MSA - M. SCALENUS ANT.
NLSC - N. L. SUPRACLAVICULARES



- CM - GANGLION CERVICALE MEDIUM
 O - OESOPHAGUS
 ASC - ANSA SUBCLAVIA
 TS - TRUNCUS SYMPATHICUS
 GT - GLANDULA THYROIDEA
 NNCC - NN. CARDIACI CERVICALES
 GS - GANGLION STELLATUM
 TTC - TRUNCUS THYROCERVICALIS
 ATI - A. THYROIDEA INF.
 ACA - A. CERVICALIS ASCENDENS
 ATS - A. TRANSVERSA CERVICIS
 ASS - A. SUPRASCAPULARIS
 CP - CUPULA PLEURAEE
 MSCM - M. STERNOCLIDOMASTOIDEOUS
 DT - DUCTUS THORACICUS
 ACC - A. CAROTIS COMMUNIS
 VJI - V. JUGULARIS INTERNA
 AV - A. VERTEBRALIS
 ATI - A. THORACICA INTERNA
 VS - V. SUBCLAVIA
 AS - A. SUBCLAVIA
 PB - PLEXUS BRACHIALIS

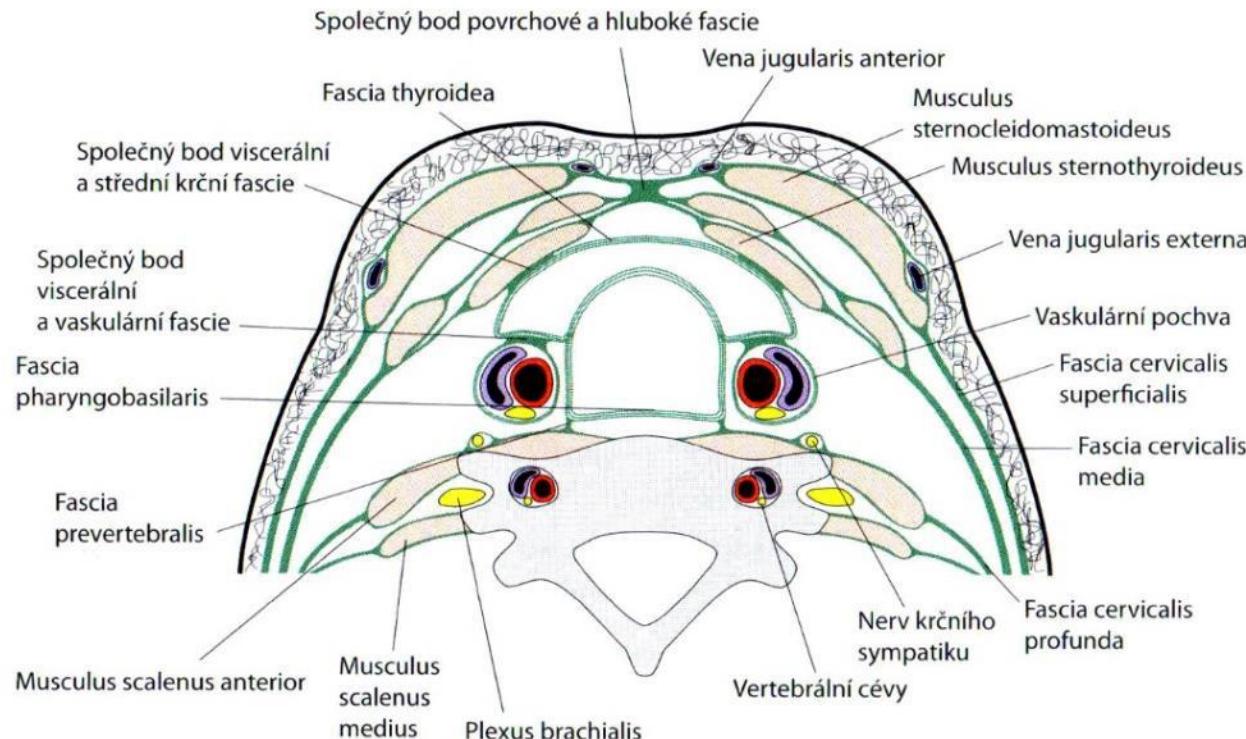


Povrchová fascie krku

- obaluje m. platysma
- splývá s hlubokou v linea alba cervicis a lig. nuchae
- na obličeji splývá se SMAS a s m. risorius
 - tenká, hodně cévnatá
 - dopředu i dozadu pokračuje do mimických svalů, nahoru do galea aponeurotica, dolů do SMAS
 - obsahuje vasa temporalia superficialia a n. auriculotemporalis
- SMAS
 - obaluje a propojuje většinu mimických svalů
 - „centrální šlacha mimických svalů“
 - fibro-elastická (600 µm)
 - zeslabuje se směrem od středu
 - v regio parotideomasseterica lze k hluboké fascii (chybí tu HTV)
- PTV je velmi slabá

Hluboká fascie krku

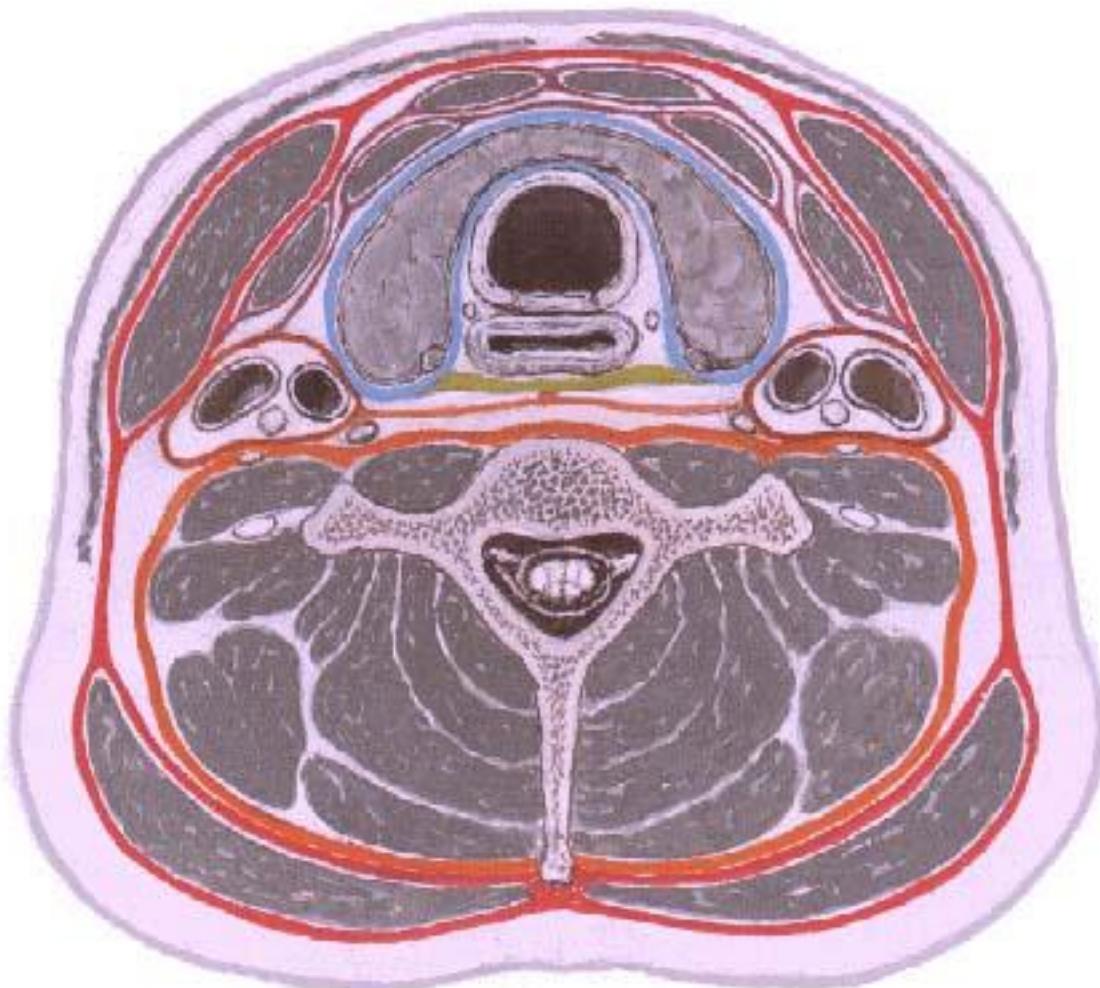
- 3-vrstevná, obalující krční svaly
- zvláště m. trapezius obaluje pevně



Fascia cervicalis – 3 listy

starý koncept

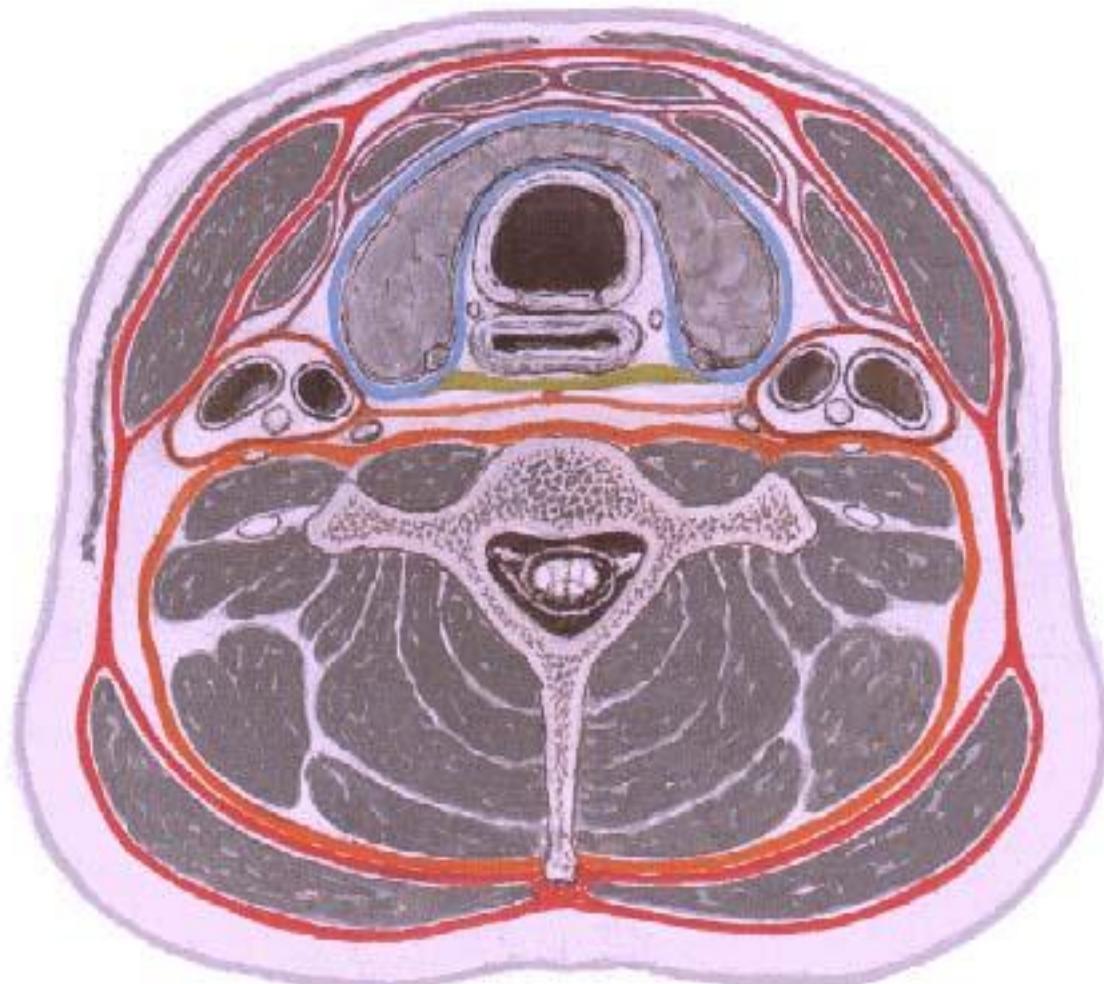
- lamina superficialis
- lamina pretrachealis
 - vagina carotica
- lamina prevertebralis



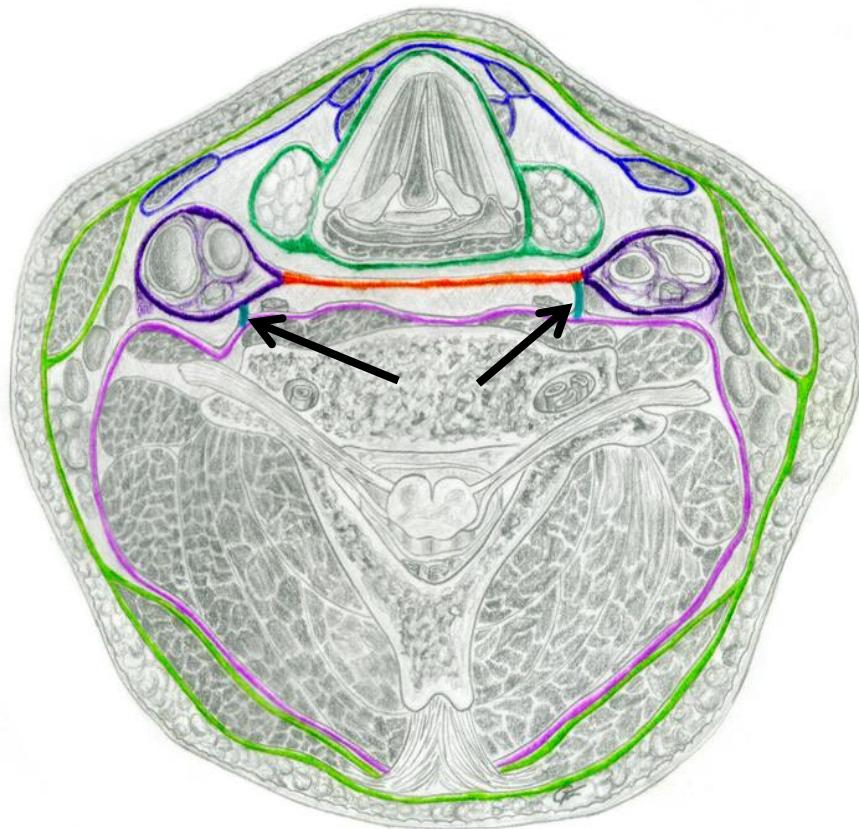
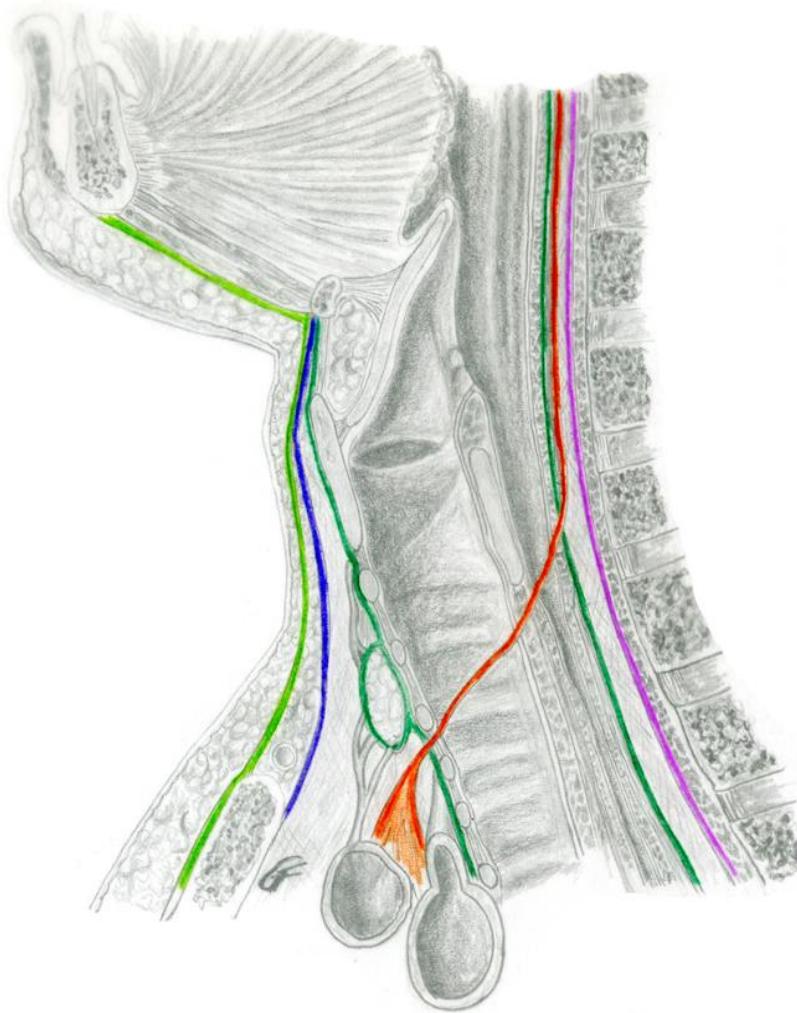
Fascia cervicalis – 3 listy

nový koncept

- lamina superficialis
- lamina media
 - vagina carotica
 - fascia intercarotica
- lamina pretrachealis
- lamina buccopharyngea
- lamina prevertebralis

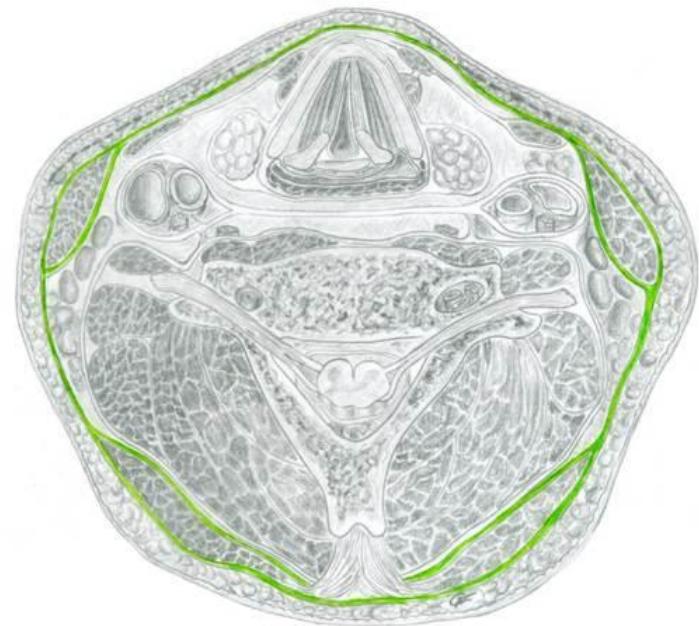
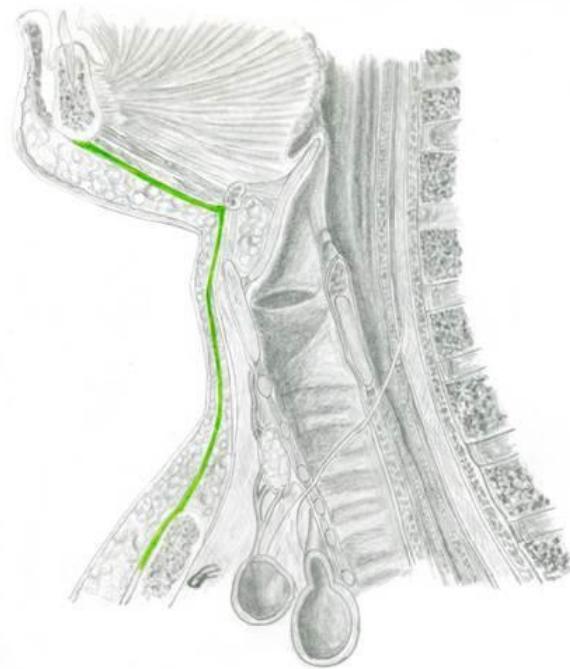


Fascie a prostory na krku



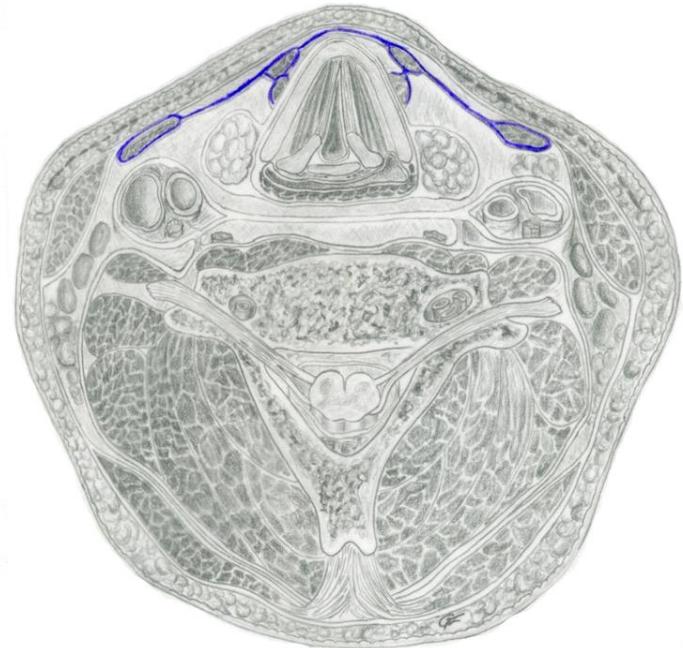
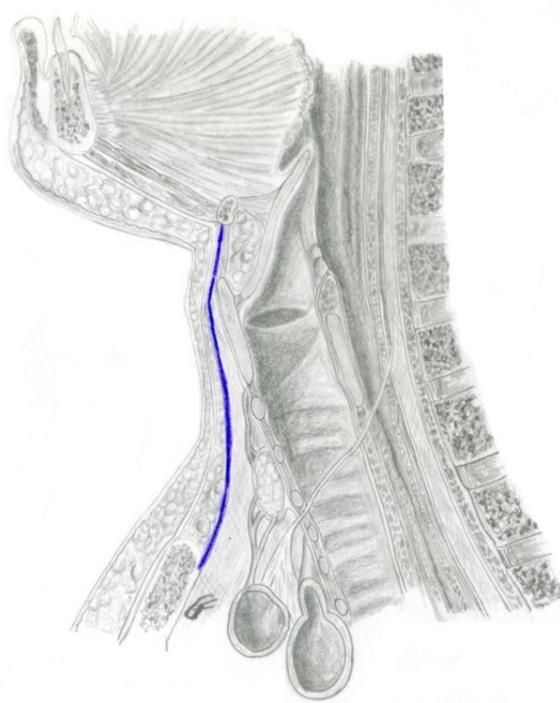
Fascie a prostory na krku

Lamina superficialis faciae cervicalis



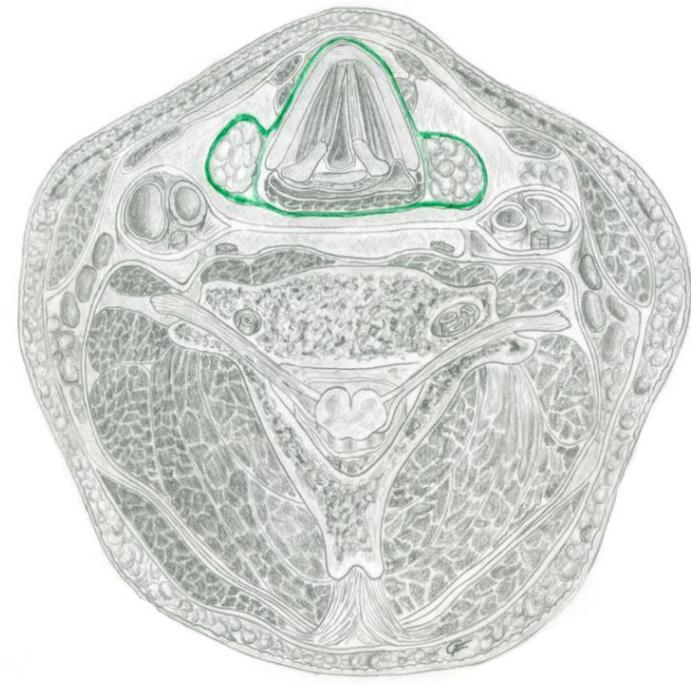
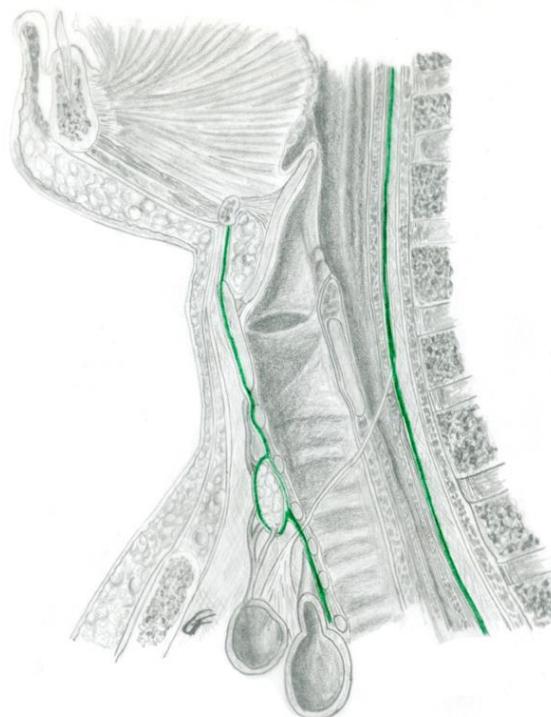
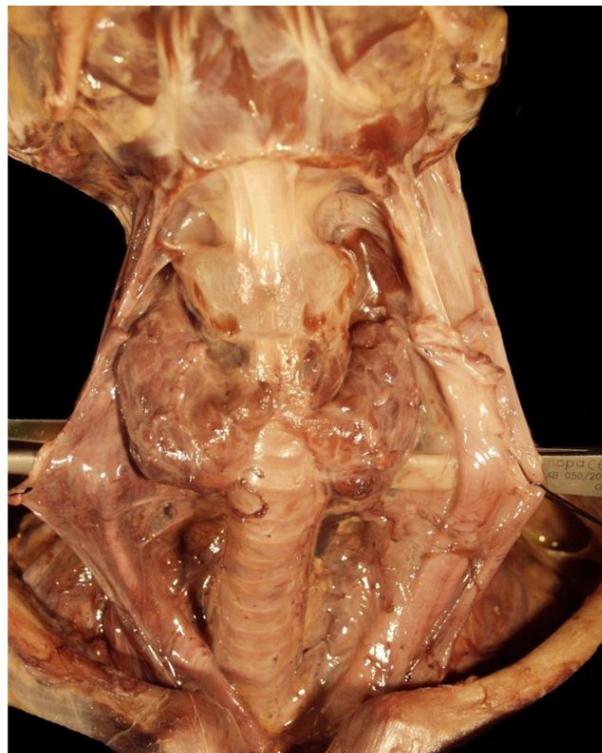
Fascie a prostory na krku

Lamina media faciae cervicalis



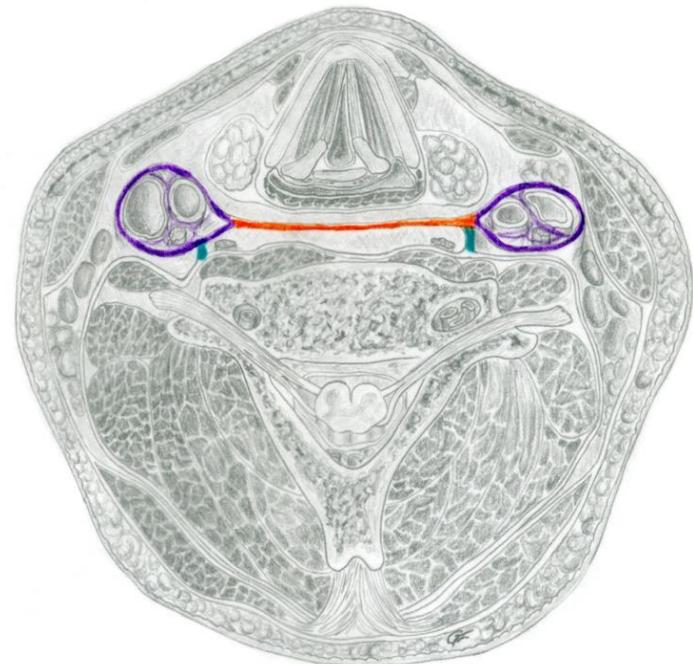
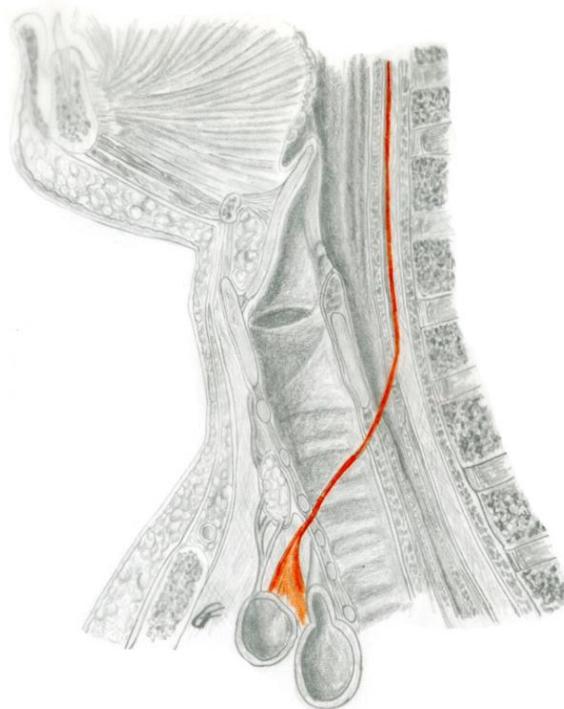
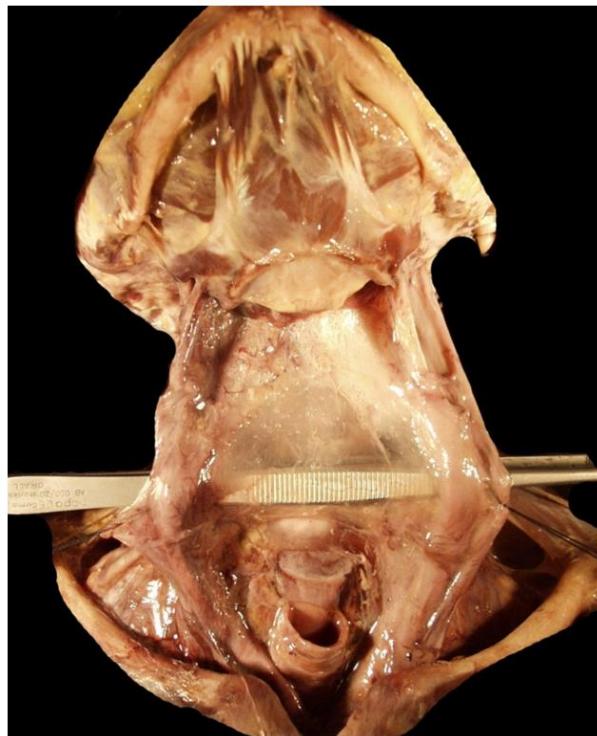
Fascie a prostory na krku

Lamina pretrachealis faciae cervicalis + fascia buccopharyngea



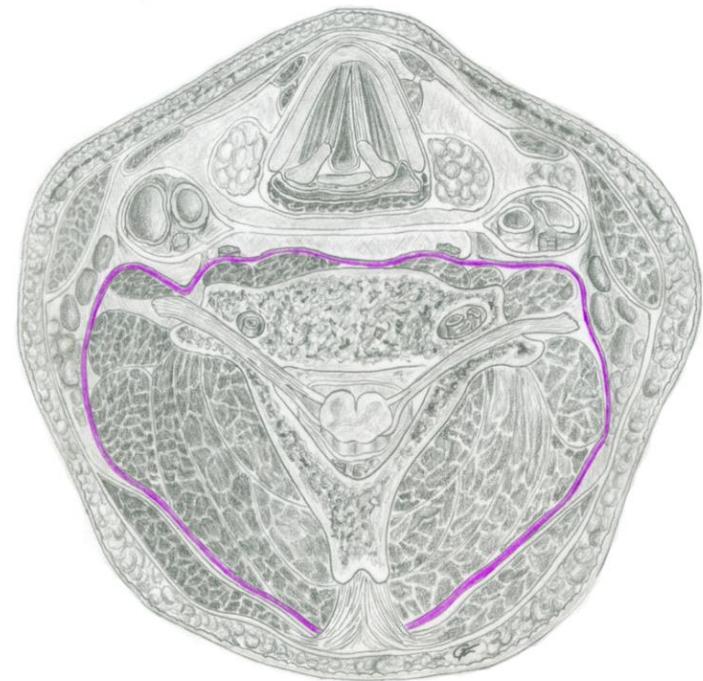
Fascie a prostory na krku

Fascia intercatorica



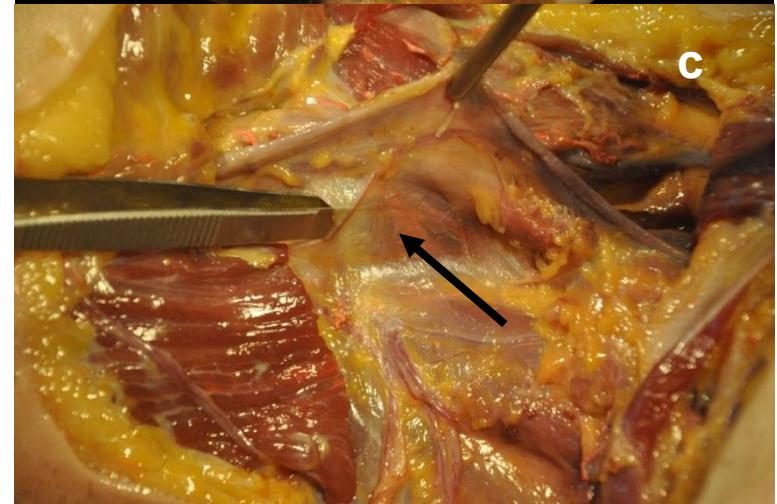
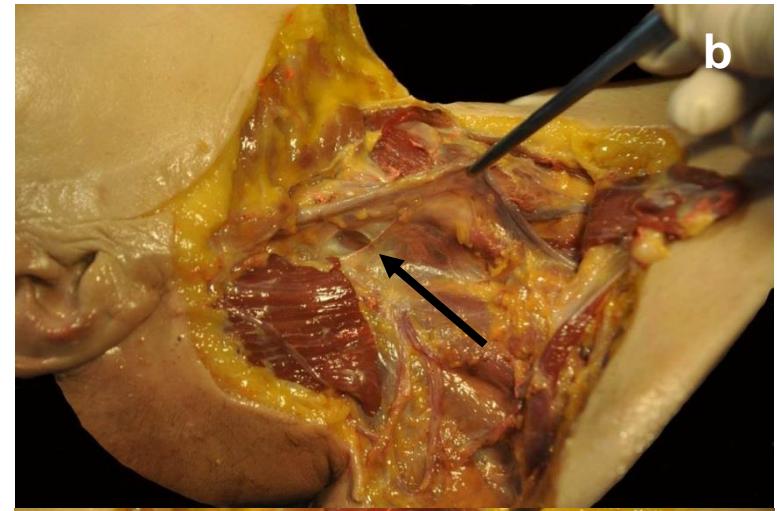
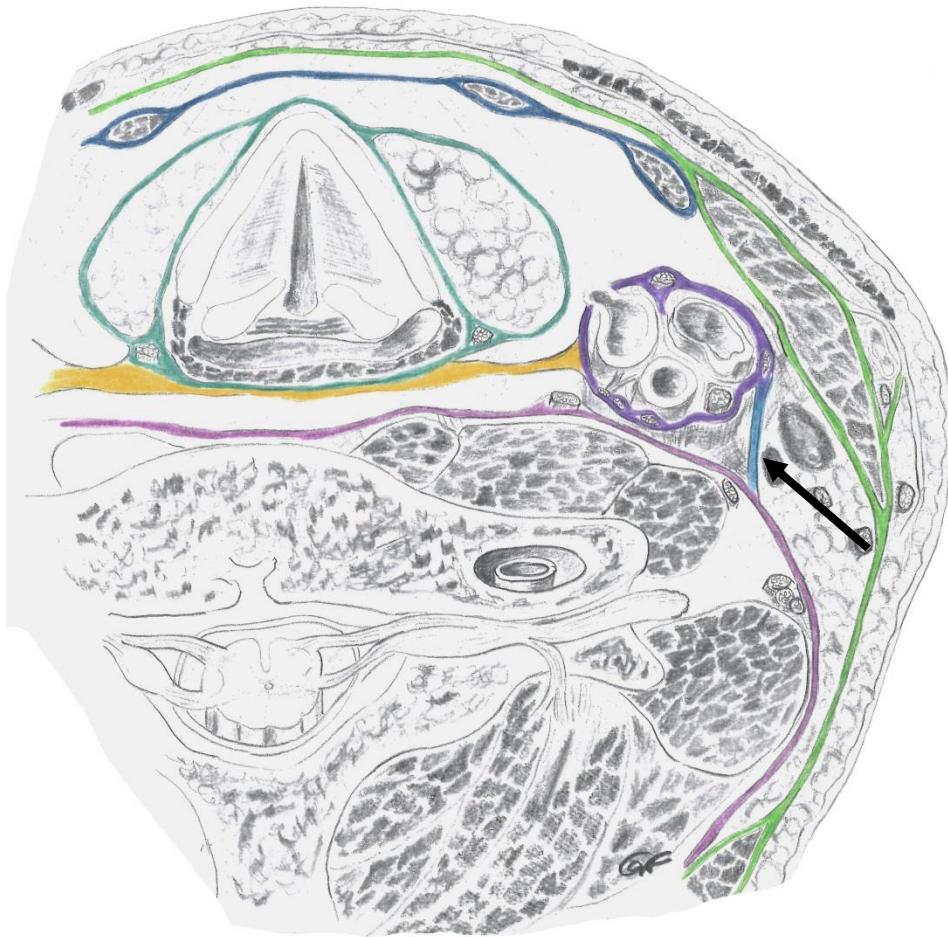
Fascie a prostory na krku

Lamina prevertebralis faciae cervicalis



Fascie a prostory na krku

Fascia alaris

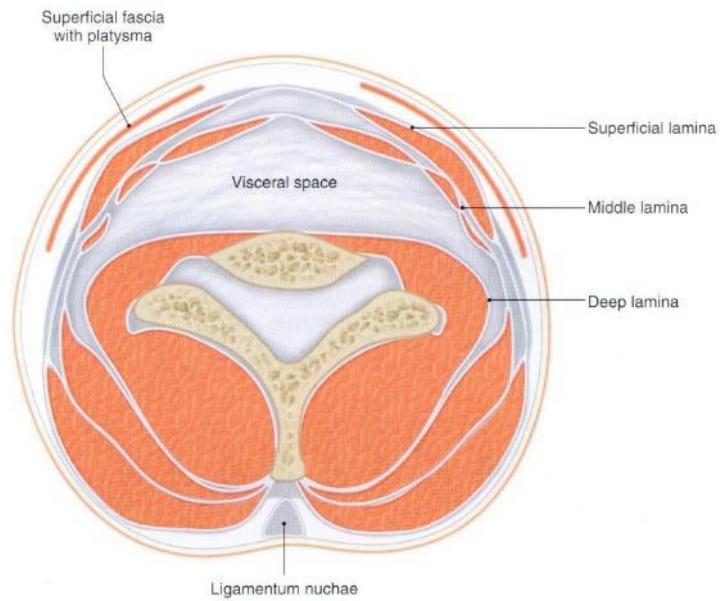


Prostory na krku

- spatium previscerale
- spatium paraviscerale
- spacium retroviscerale

navazuje na ně:

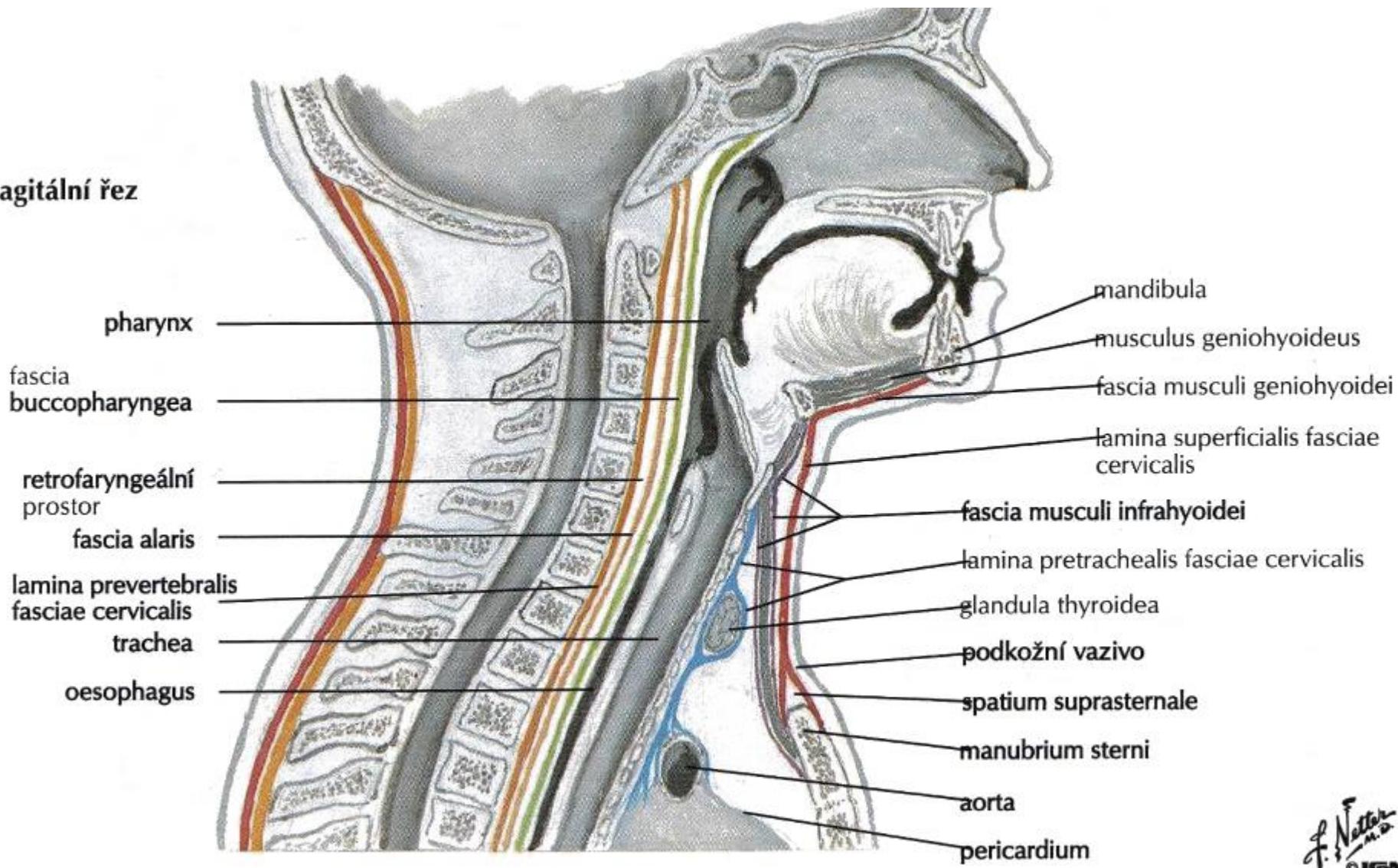
- kraniálně: spatium parapharyngeum
spatium retropharyngeum
- kaudálně: spatium suprasternale
mediastinum superius



Prostory na krku

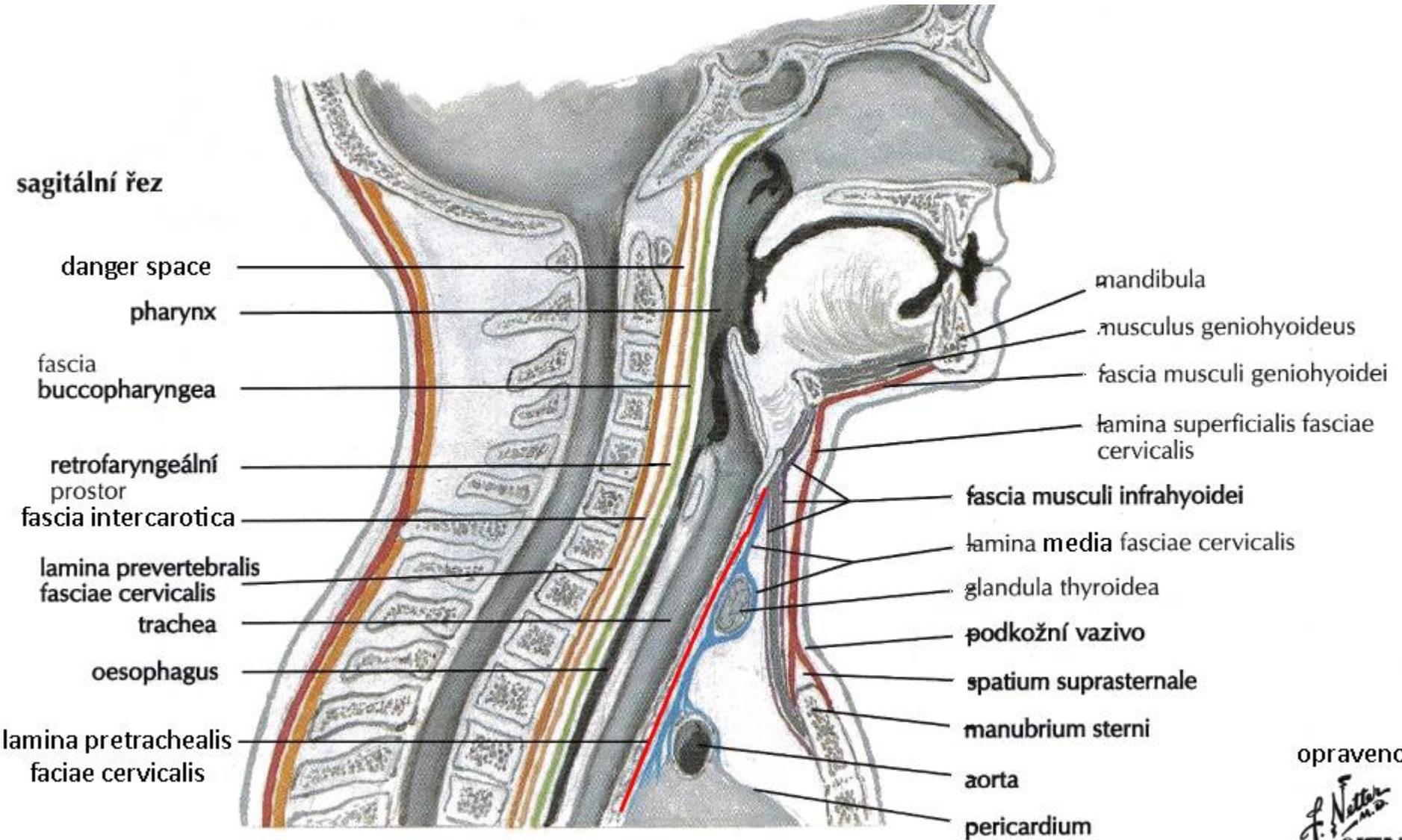
původní obrázek s chybami

sagitální řez



Prostory na krku

sagitální řez



Septum styloideum („Riolanova kytice“)

svalová přepážka obalená fasciemi

dělí kraniální část spatum parapharyngeum na spatum pre- + retrostyloideum

končí přibližně v čáře mezi processus styloideus a cornu majus ossis hyoidei

- m. stylophyrangeus
- m. styloglossus
- m. stylohyoideus + lig. stylohyoideum
- venter posterior m. digastrici
- m. sternocleidomastoideus

SEPTUM STYLOIDEUM

