

MALE GENITAL SYSTEM



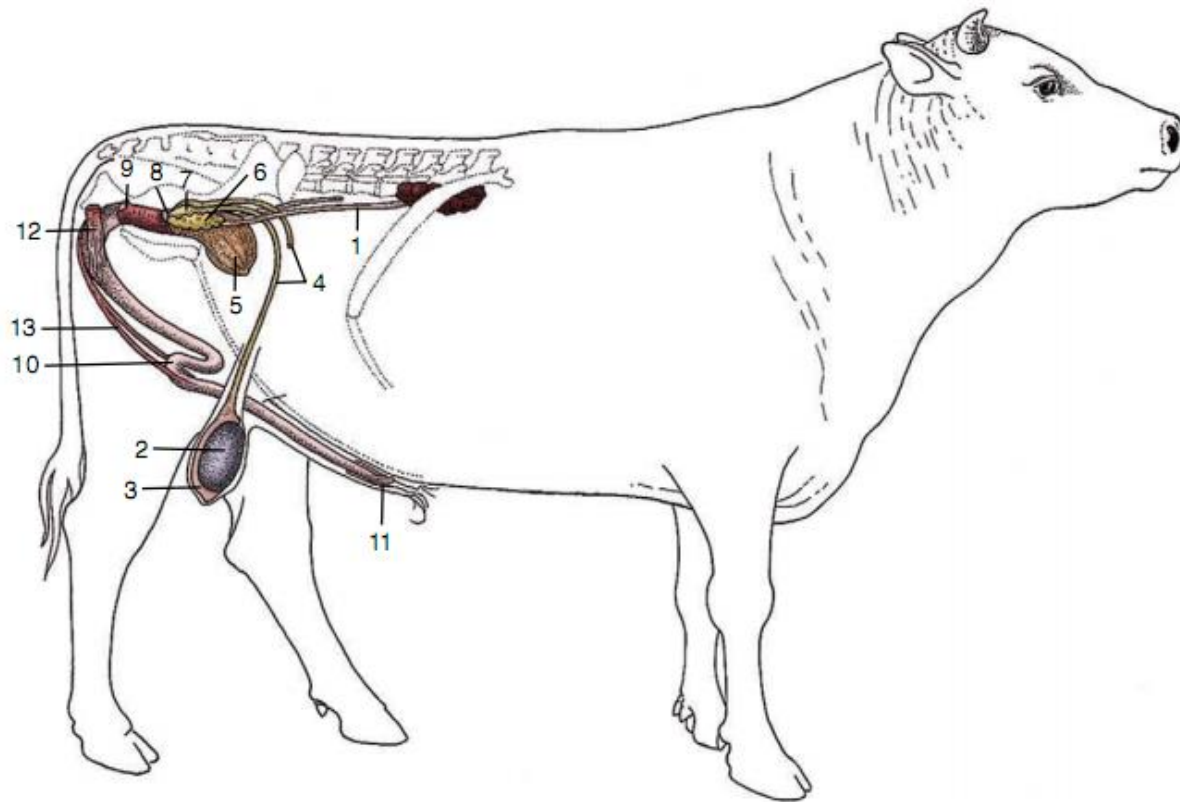
✘ دستگاه تناسلی نر از چهار بخش زیر تشکیل شده است
:

✘ 1- گناد یا همان بیضه ها (Testis) که وظیفه تولید اسپرم و هورمونهای جنسی را به عهده دارند .

✘ 2- مجاری مانند اپی دیدیم و کانال دفران و میزراه که مشترک با سیستم ادراری است.

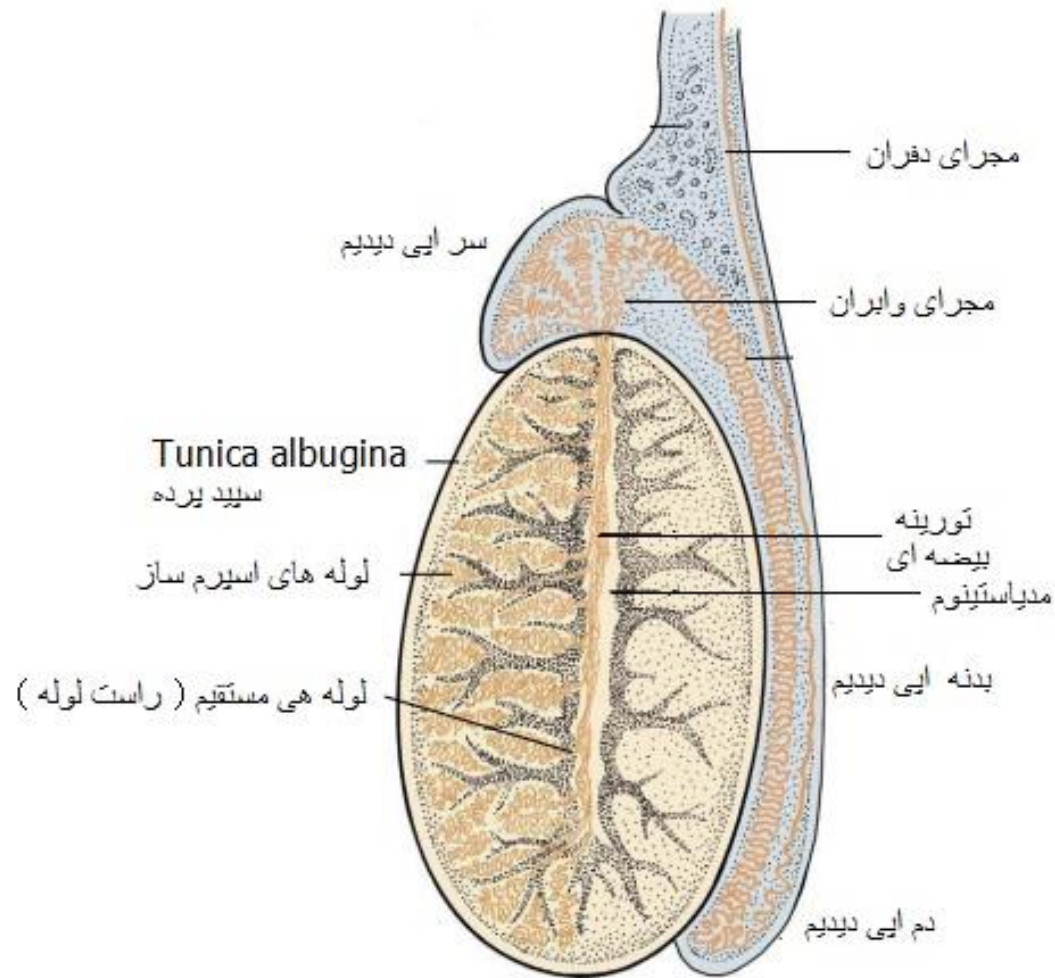
✘ 3- غدد ضمیمه ای که وظیفه تولید مایع منی (Semen) را به عهده دارند.

✘ 4- آلت تناسلی (Penis) که همان اندام جفت گیری در جنس نر به شمار می آید.



1, Ureter; 2, right testis; 3, epididymis; 4, deferent duct; 5, bladder; 6, vesicular gland; 7, ampulla of deferent duct; 8, body of prostate; 9, bulbourethral gland; 10, sigmoid flexure of penis; 11, glans penis; 12, ischiocavernosus; 13, retractor penis.

Testis & Epididymis



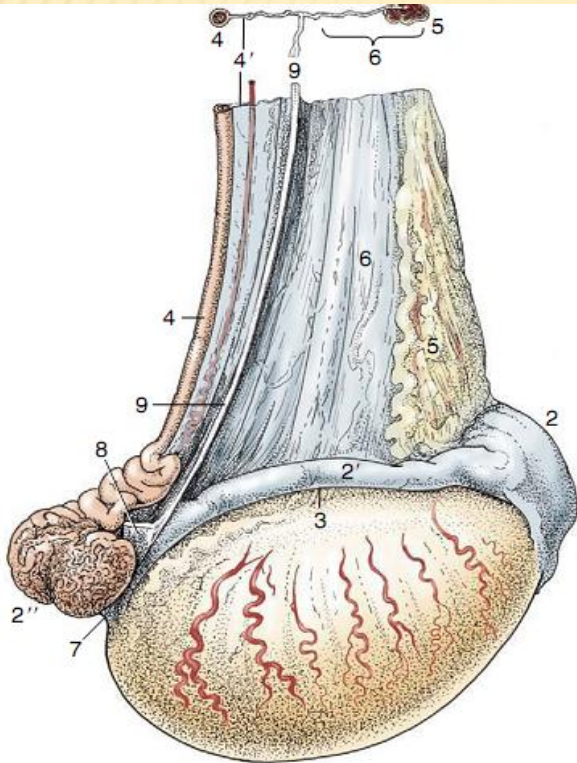
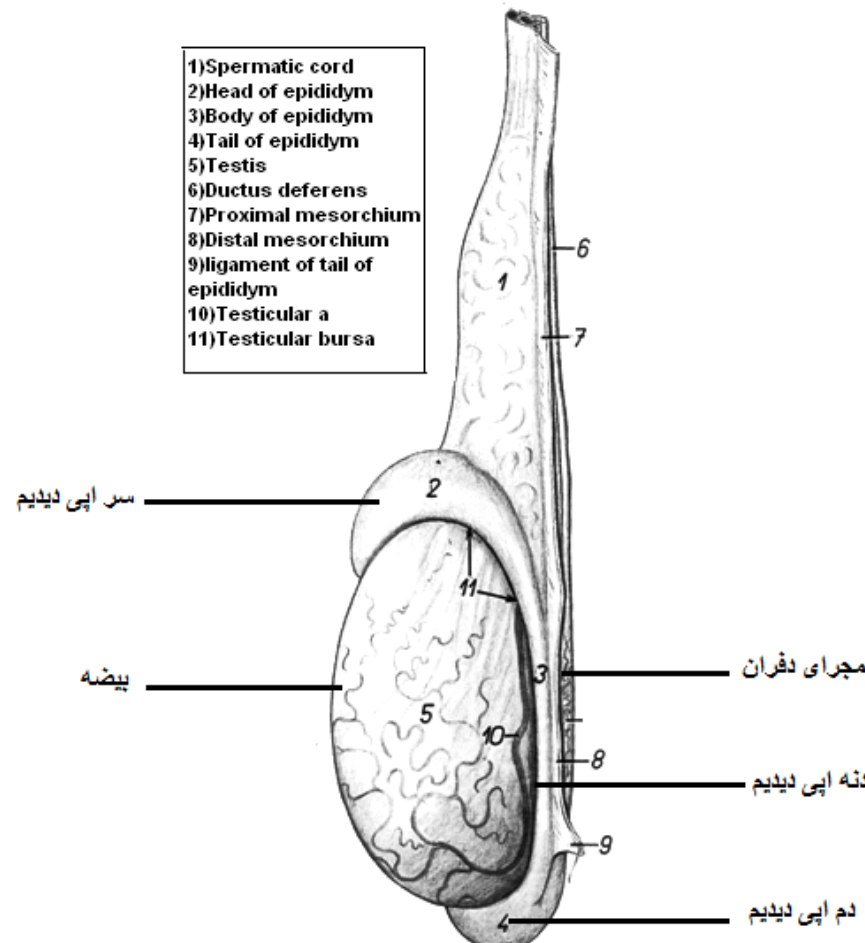
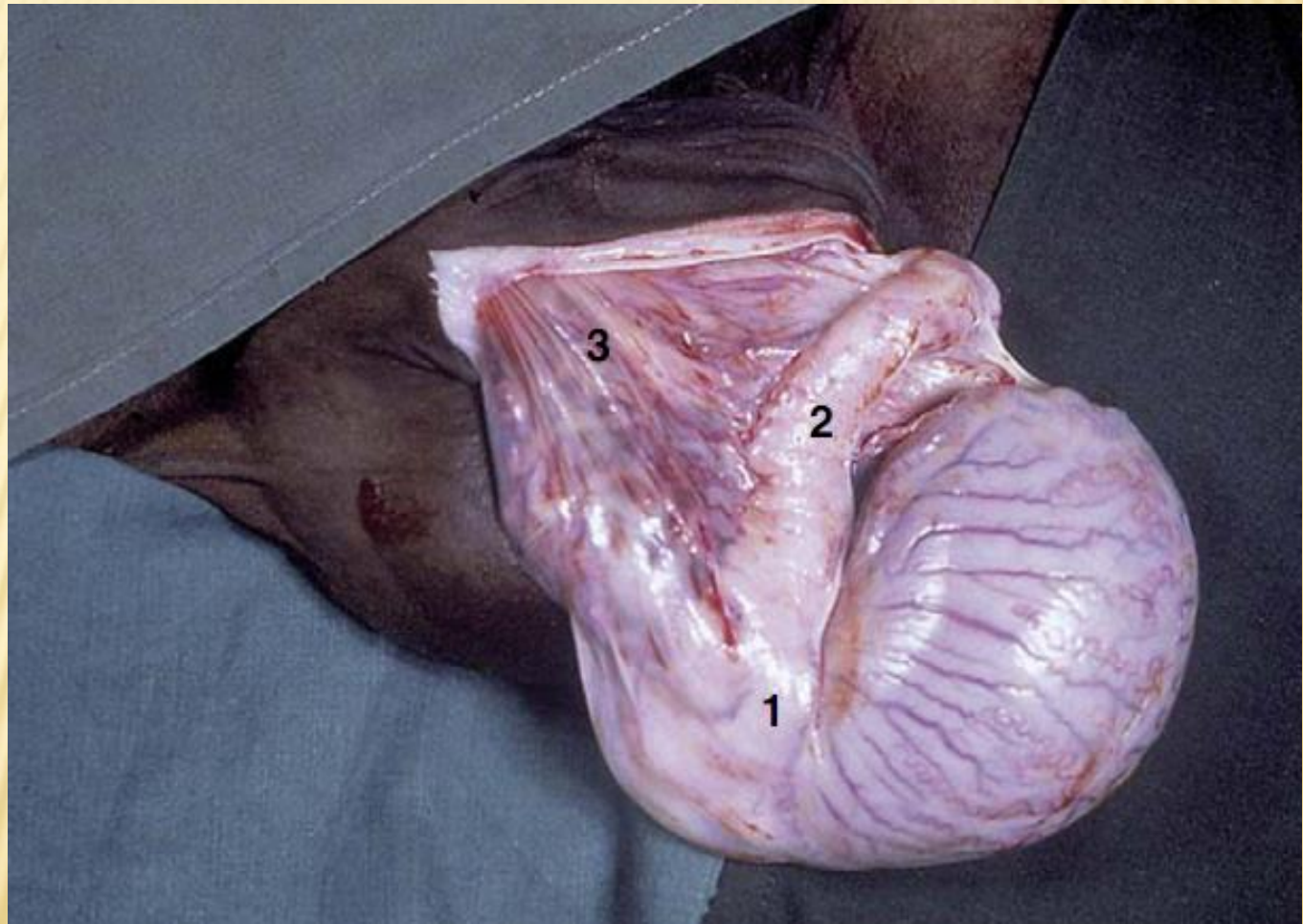


Figure 5-41 Lateral view of the right testis of a stallion. 1, Testis; 2, head of epididymis; 2', body of epididymis; 2'', tail of epididymis; 3, testicular bursa; 4, deferent duct; 4', mesoductus deferens; 5, pampiniform plexus; 6, mesorchium; 7, proper ligament of testis; 8, ligament of tail of epididymis; 9, cut edge of fold connecting visceral and parietal layers of the vaginal tunic.



- 1) Spermatic cord
- 2) Head of epididym
- 3) Body of epididym
- 4) Tail of epididym
- 5) Testis
- 6) Ductus deferens
- 7) Proximal mesorchium
- 8) Distal mesorchium
- 9) ligament of tail of epididym
- 10) Testicular a
- 11) Testicular bursa



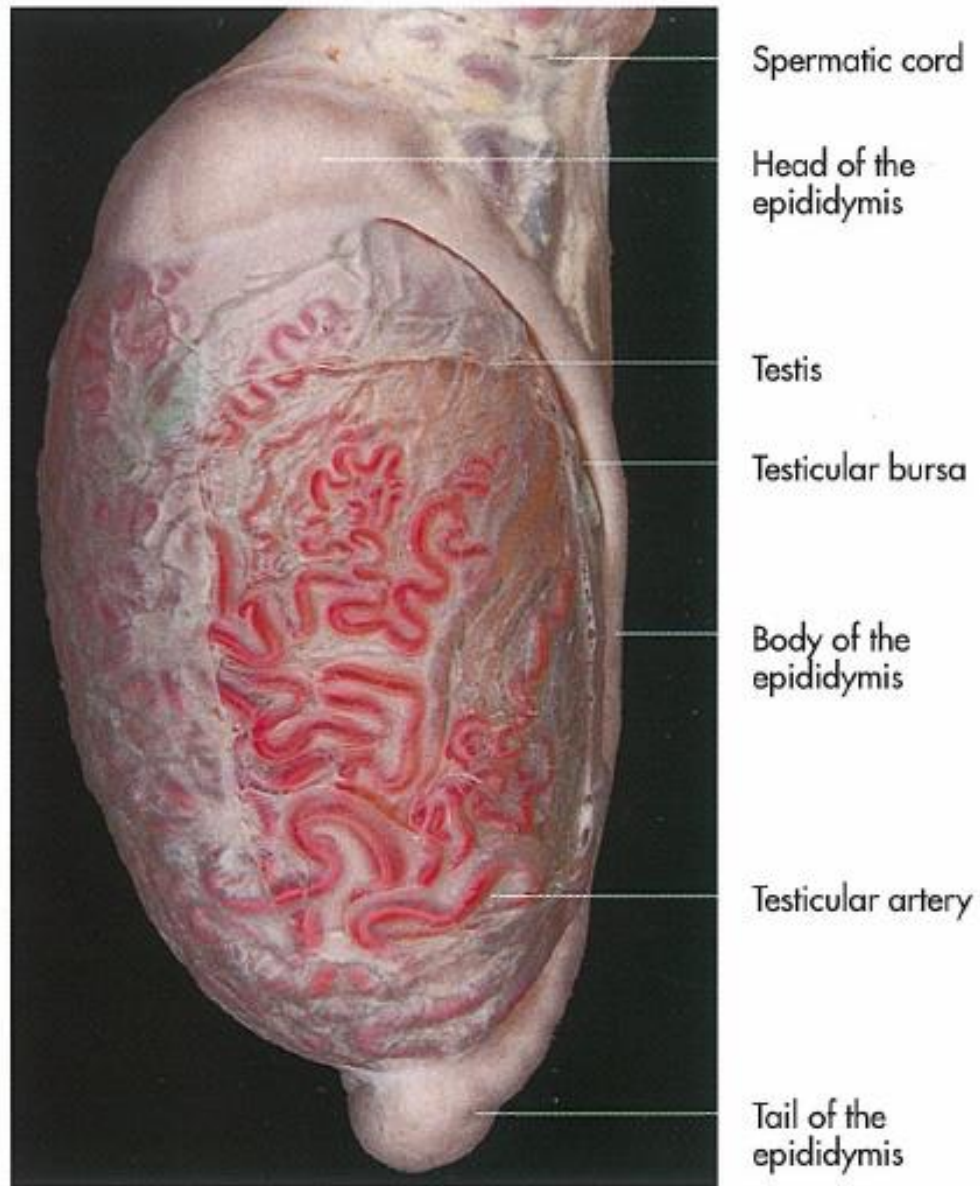
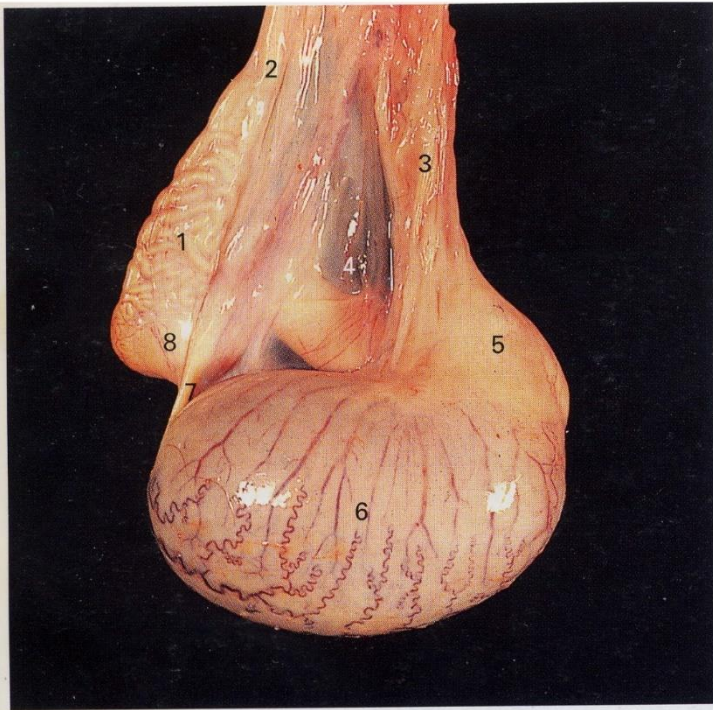
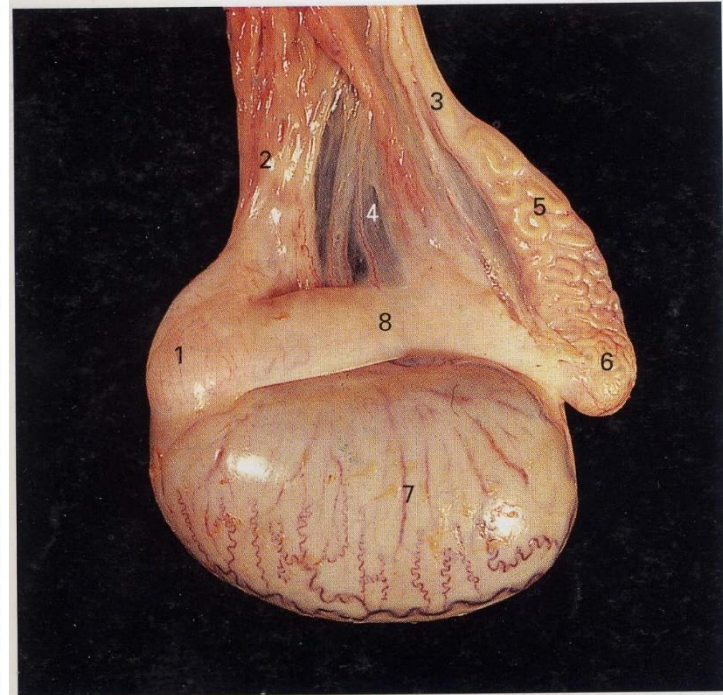


Fig. 10-16. Testis of a bull after injection of the blood vessels.



343. Medial view of the left testis of a horse.

- | | | | |
|---|--|---|--|
| 1 | Convoluted part of the deferent duct | 4 | Mesorchium |
| 2 | Beginning of the straight part of the deferent duct | 5 | Head of the epididymis |
| 3 | Vascular cone of the testis; individual vessels cannot be seen through the connective tissue | 6 | Medial surface of the testis |
| | | 7 | Ligament of the tail of the epididymis |
| | | 8 | Tail of the epididymis |



342. Lateral view of the left testis of a horse.

- | | | | |
|---|--|---|--------------------------------------|
| 1 | Head of the epididymis | 4 | Mesorchium |
| 2 | Vascular cone of the testis; individual vessels cannot be seen through the connective tissue | 5 | Convoluted part of the deferent duct |
| 3 | Beginning of the straight part of the deferent duct | 6 | Tail of the epididymis |
| | | 7 | Lateral surface of the testis |
| | | 8 | Body of the epididymis |

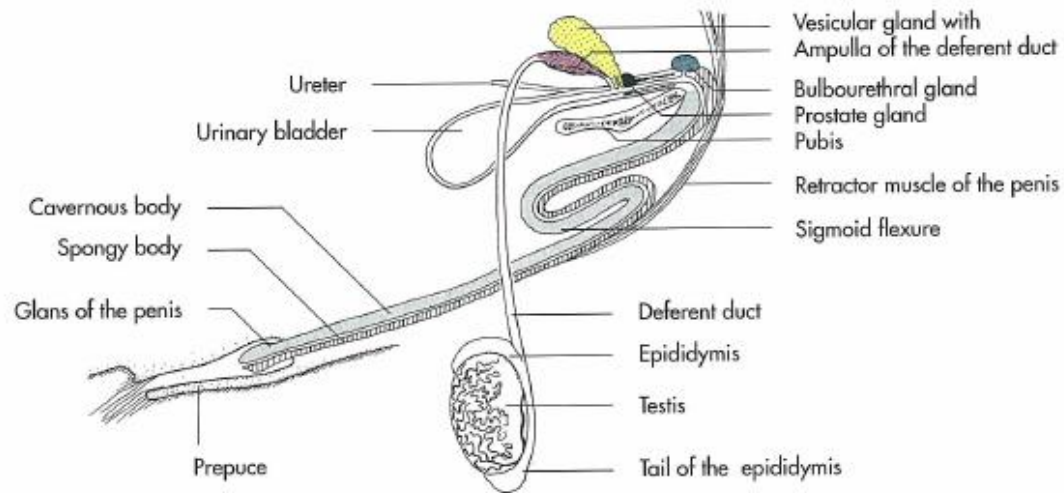
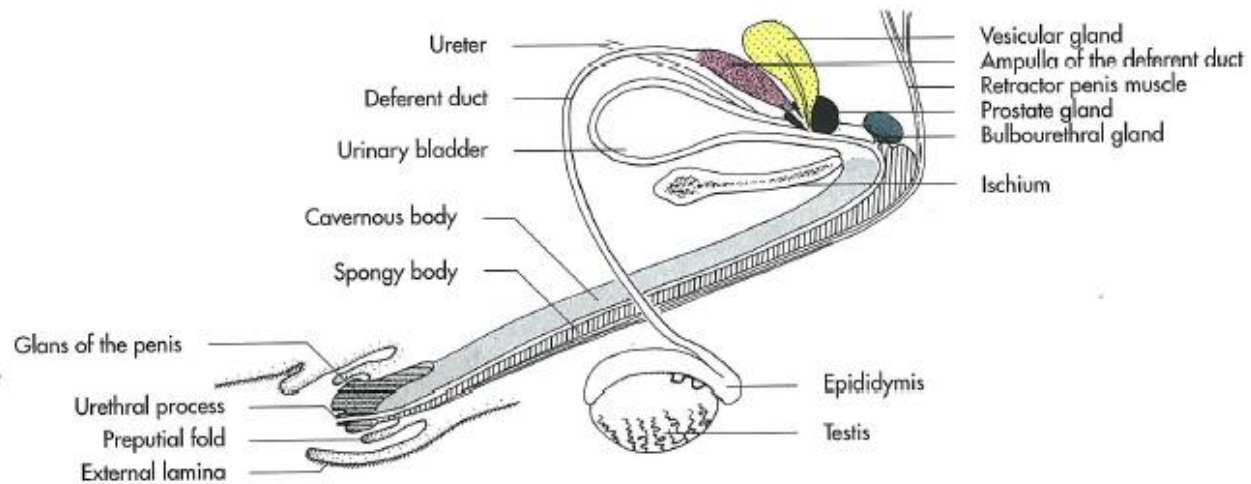


Fig. 10-4. Genital organs of the bull, schematic.



Stallion

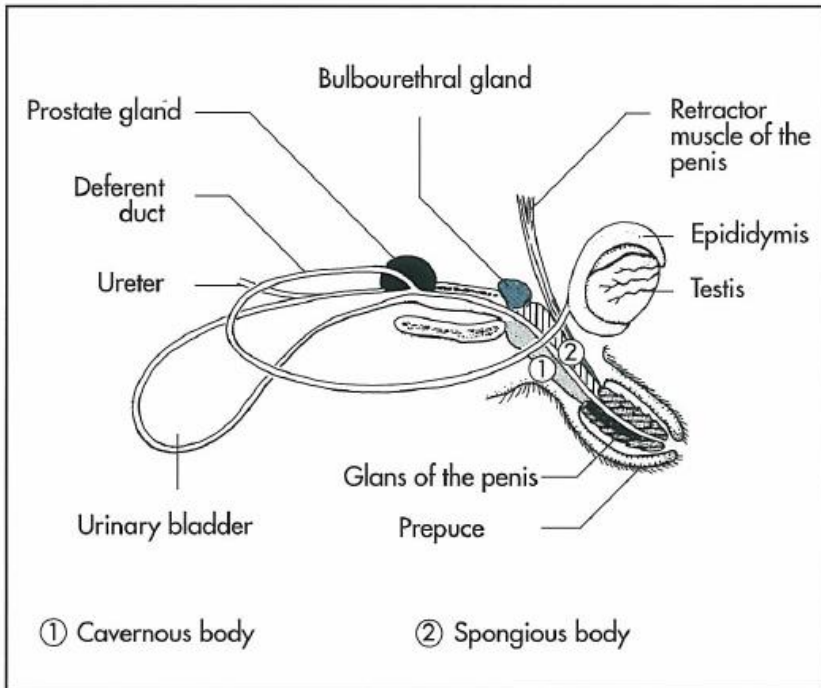


Fig. 10-1. Genital organs of the male cat, schematic.

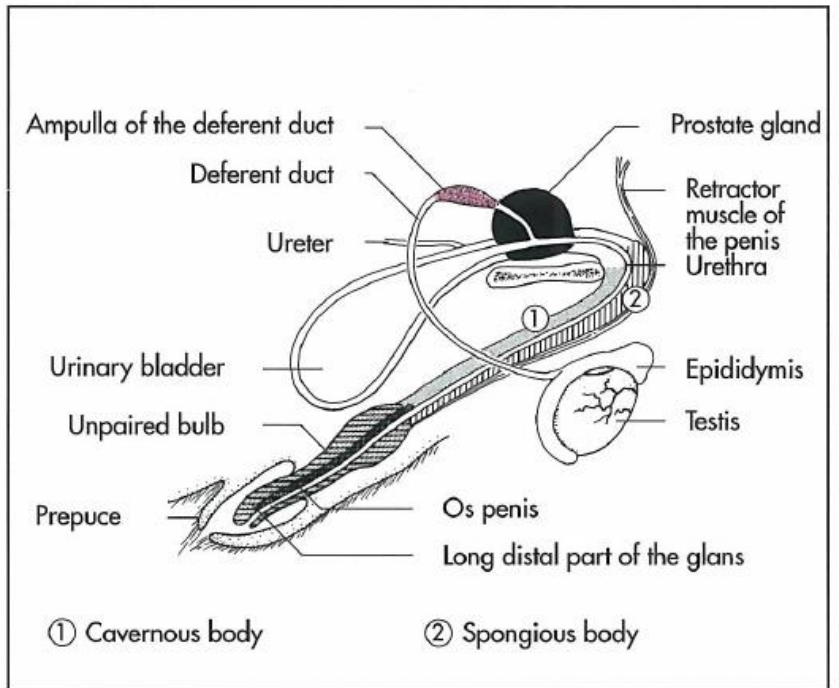
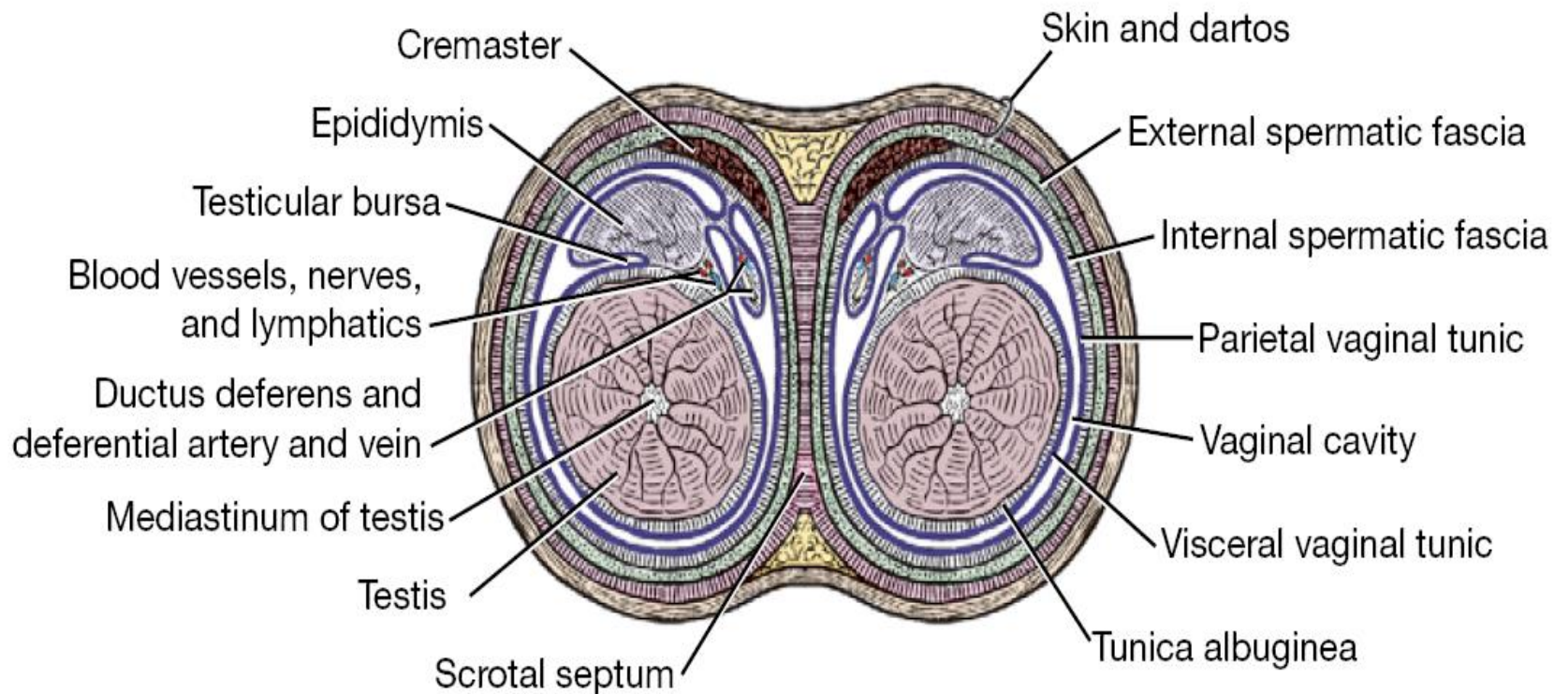


Fig. 10-2. Genital organs of the male dog, schematic.

Scrotum



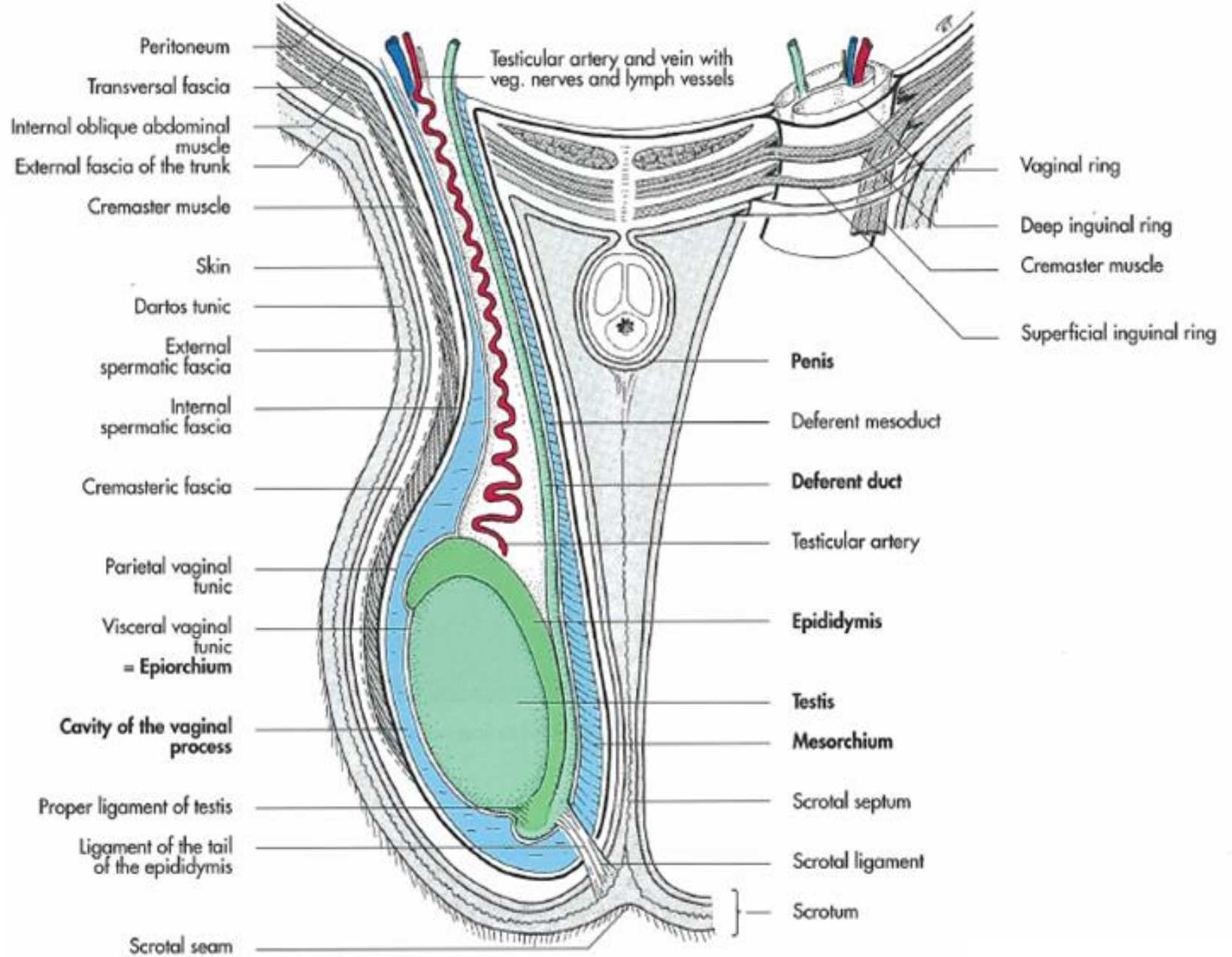
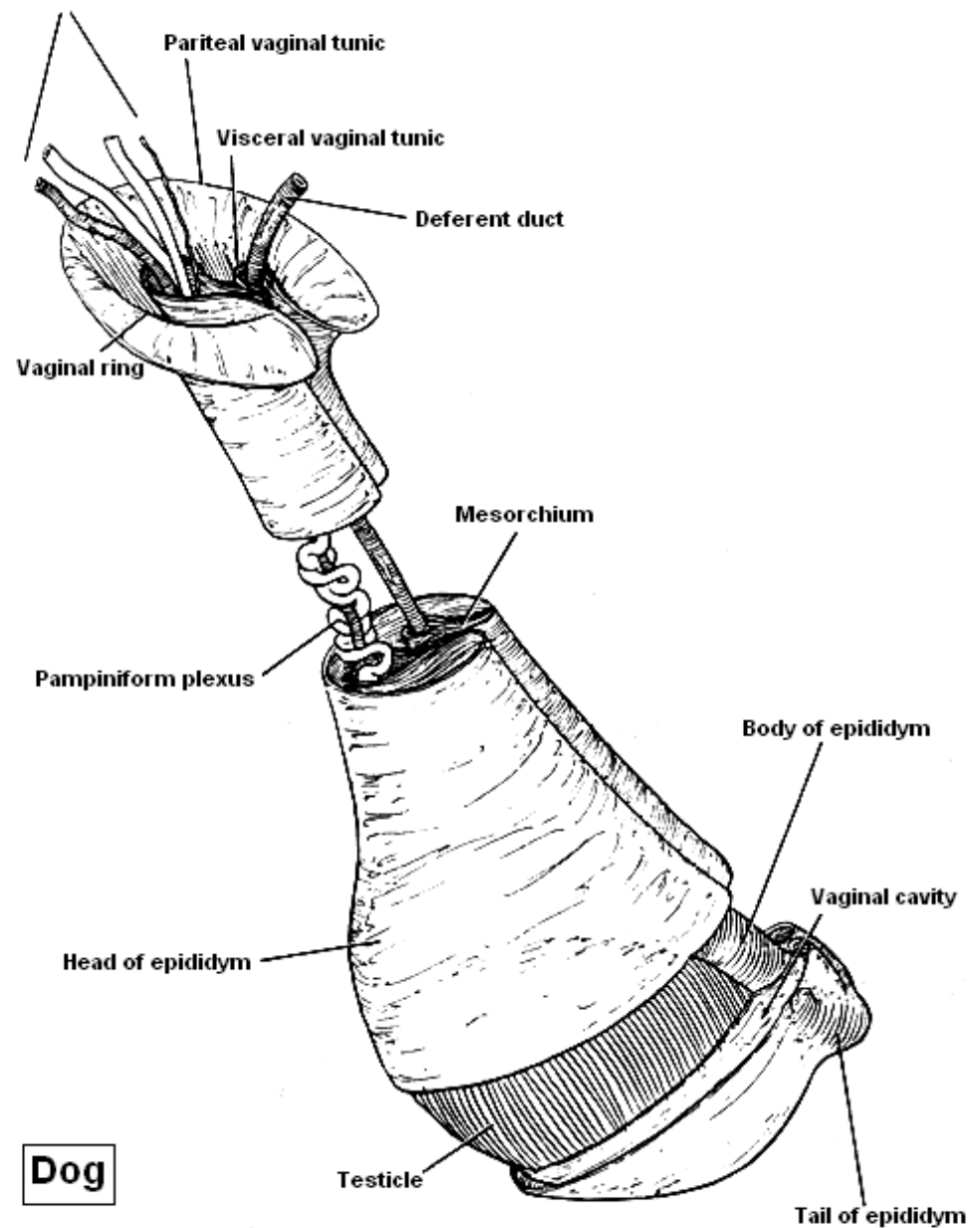


Fig. 10-14. Investments of the testis and spermatic cord of the bull, schematic.

Spermatic cord



Testicular a, v, n & lymphatics



Dog

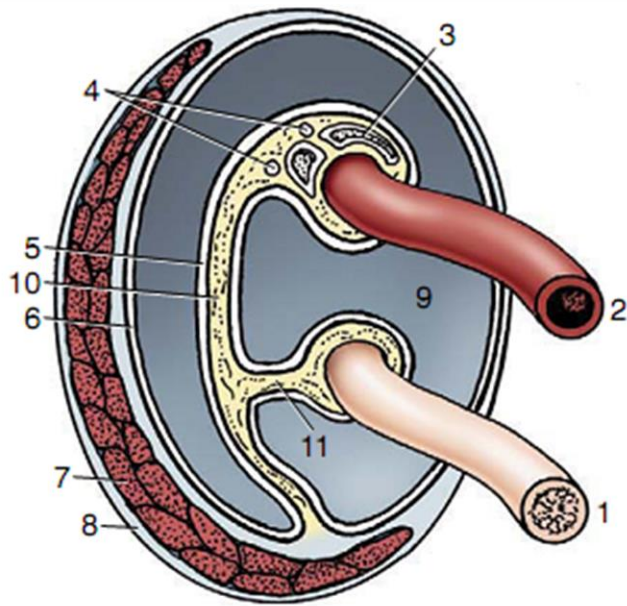


Figure 5–43 Transverse section of the spermatic cord and its immediate investments, schematic. 1, Deferent duct; 2, testicular artery (coiled); 3, pampiniform plexus; 4, testicular nerves and lymph vessels; 5, visceral layer of vaginal tunic; 6, parietal layer of vaginal tunic; 7, cremaster muscle; 8, external spermatic fascia; 9, vaginal cavity; 10, mesorchium; 11, mesoductus.

Pampiniform plexus

Testicular artery

Pampiniform plexus

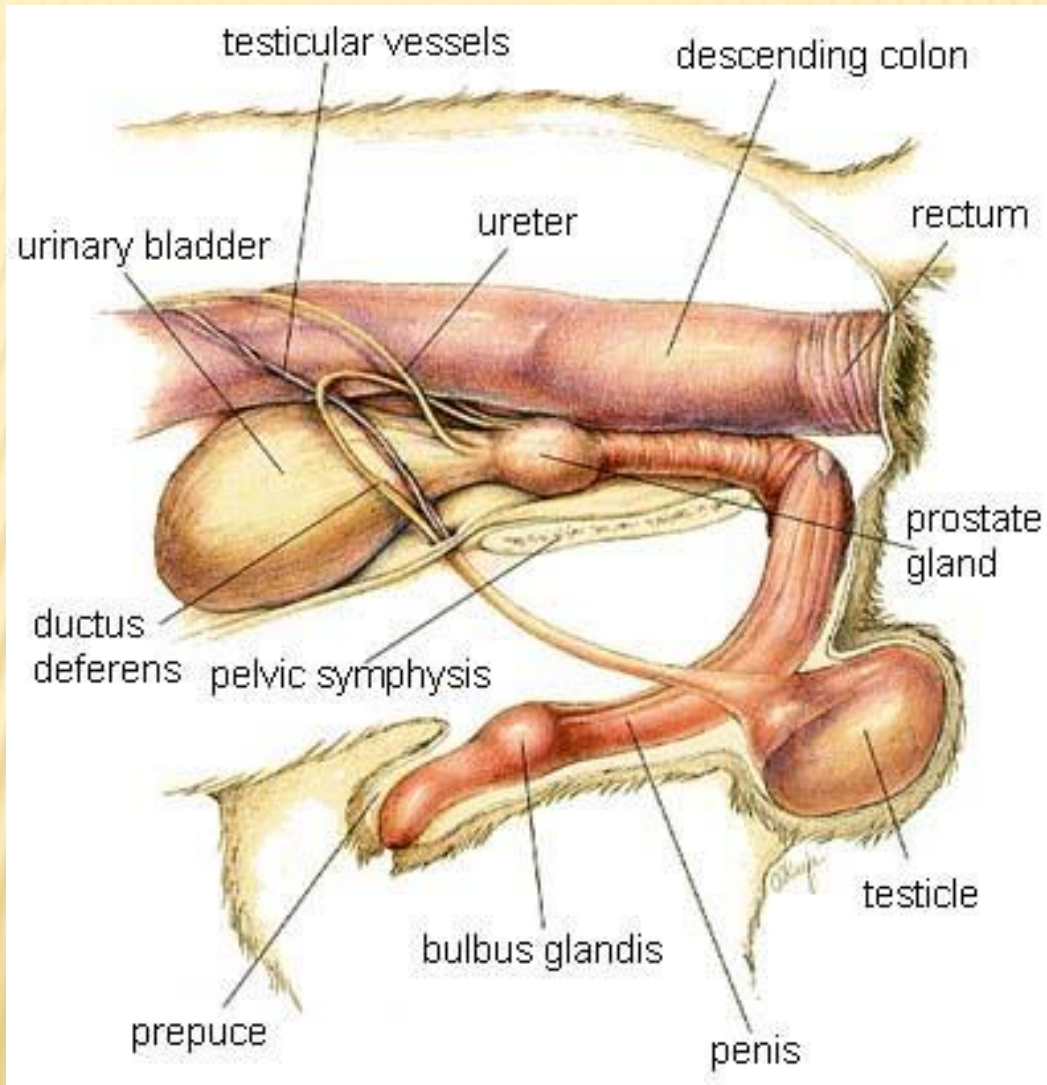
Testicular artery

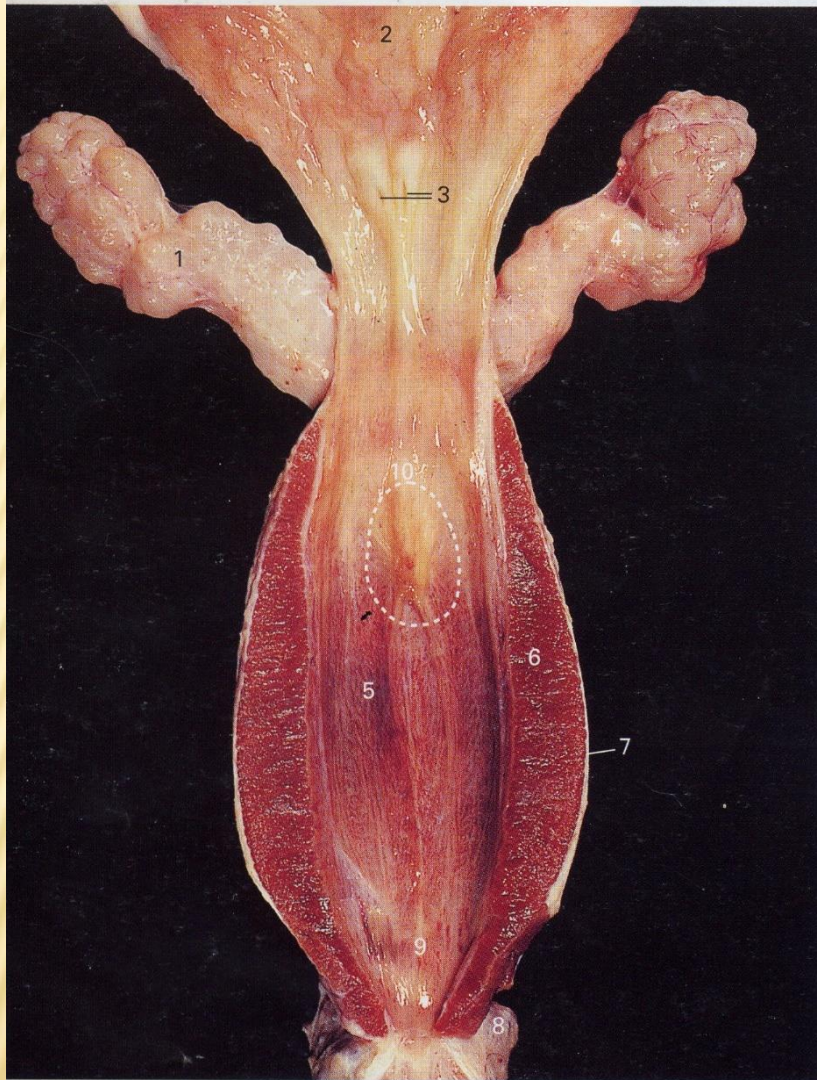


Fig. 10-15. Testicular artery and vein within the spermatic cord of a ram, corrosion cast.

Pampiniform plexus

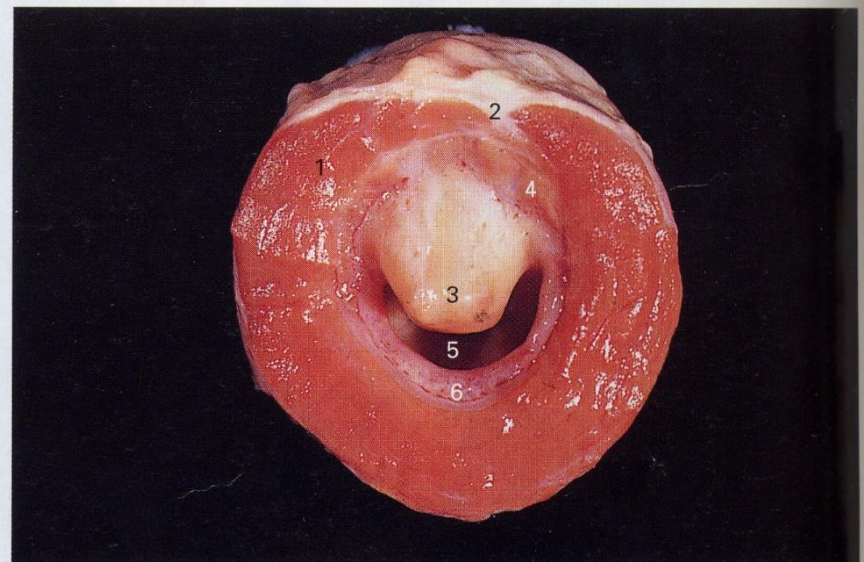
Deferent Duct





354. Bovine pelvic urethra opened from the ventral aspect.

- | | |
|---|---|
| 1 Right vesicular gland | 7 Fascia covering the urethral muscle |
| 2 Mucosa of the bladder | 8 Left bulbourethral gland |
| 3 Openings of the ureters | 9 Glandular openings |
| 4 Left vesicular gland | 10 Colliculus seminalis where the openings of the ejaculatory ducts are located |
| 5 Openings of the disseminate prostate glands | |
| 6 Urethral muscle | |



355. Caudal view of a transverse section of the pelvic urethra of a bull immediately caudal of the colliculus seminalis.

- | | |
|--|--|
| 1 Fleshy part of the urethral muscle | 4 Disseminate part of the prostate gland |
| 2 Dorsal tendinous part of the urethral muscle | 5 Urethral lumen |
| 3 Colliculus seminalis | 6 Spongy erectile tissue |

Genital gland

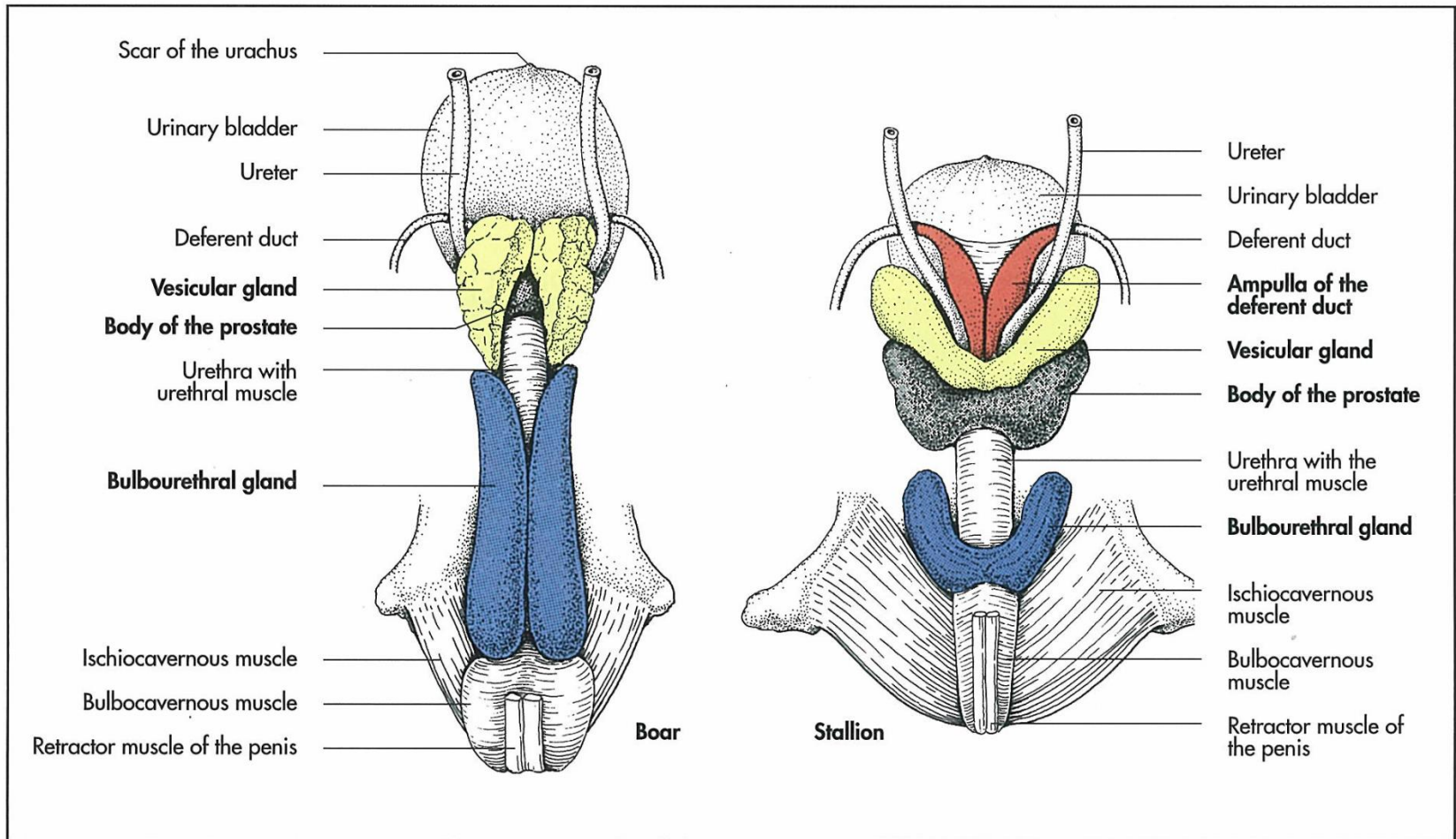


Fig. 10-20. Accessory genital glands of the boar and stallion, schematic.

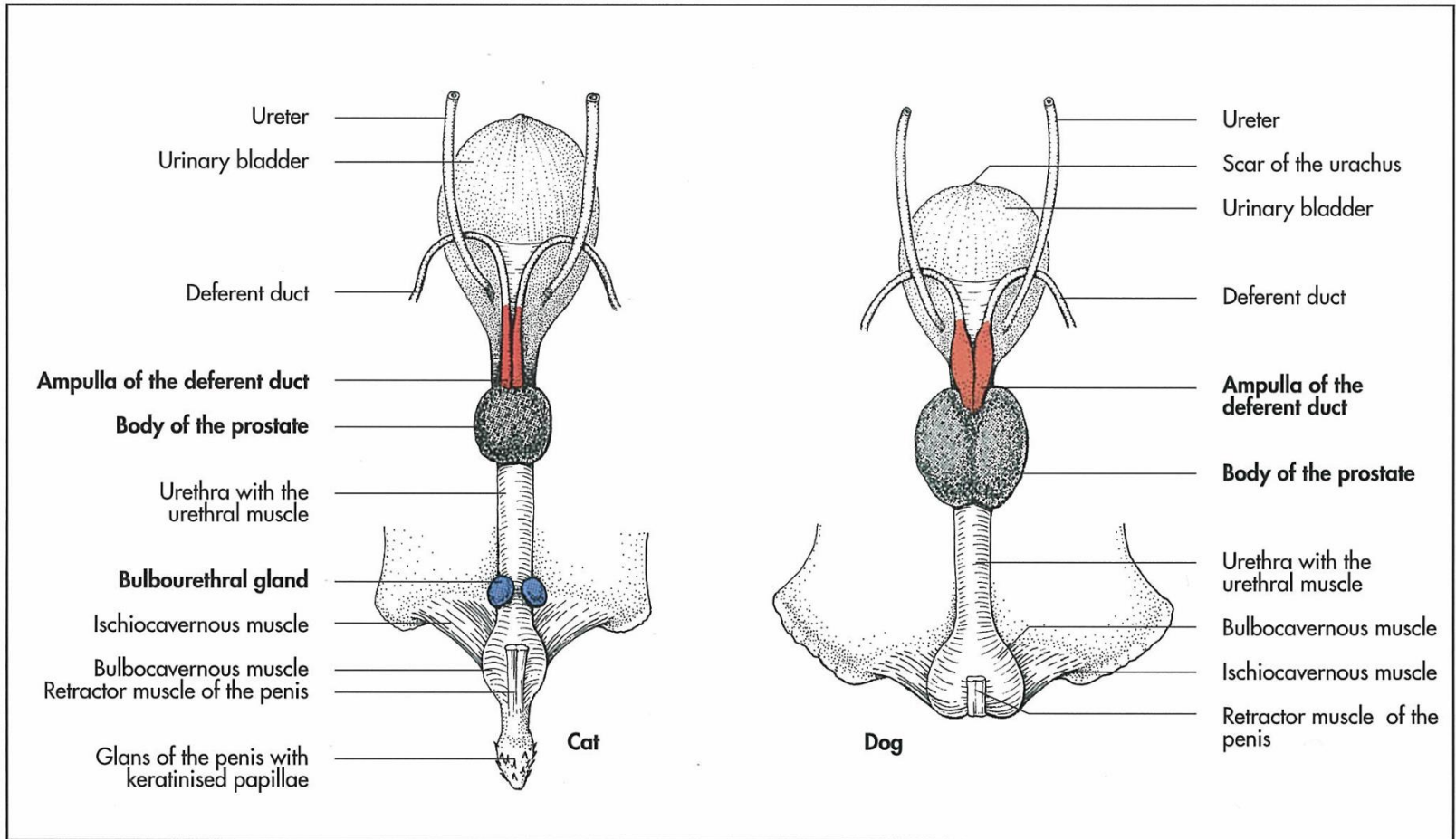


Fig. 10-19. Accessory genital glands of the cat and dog, schematic.

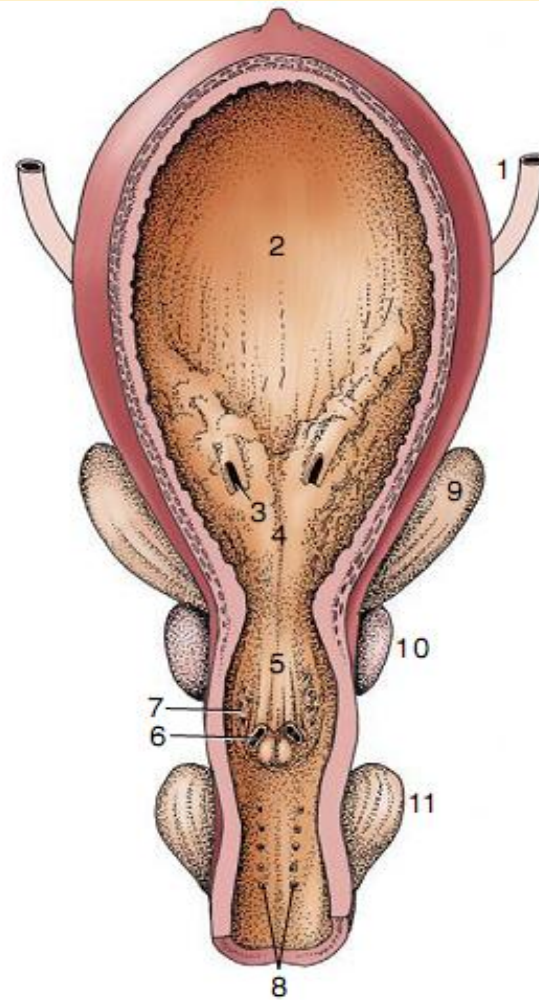
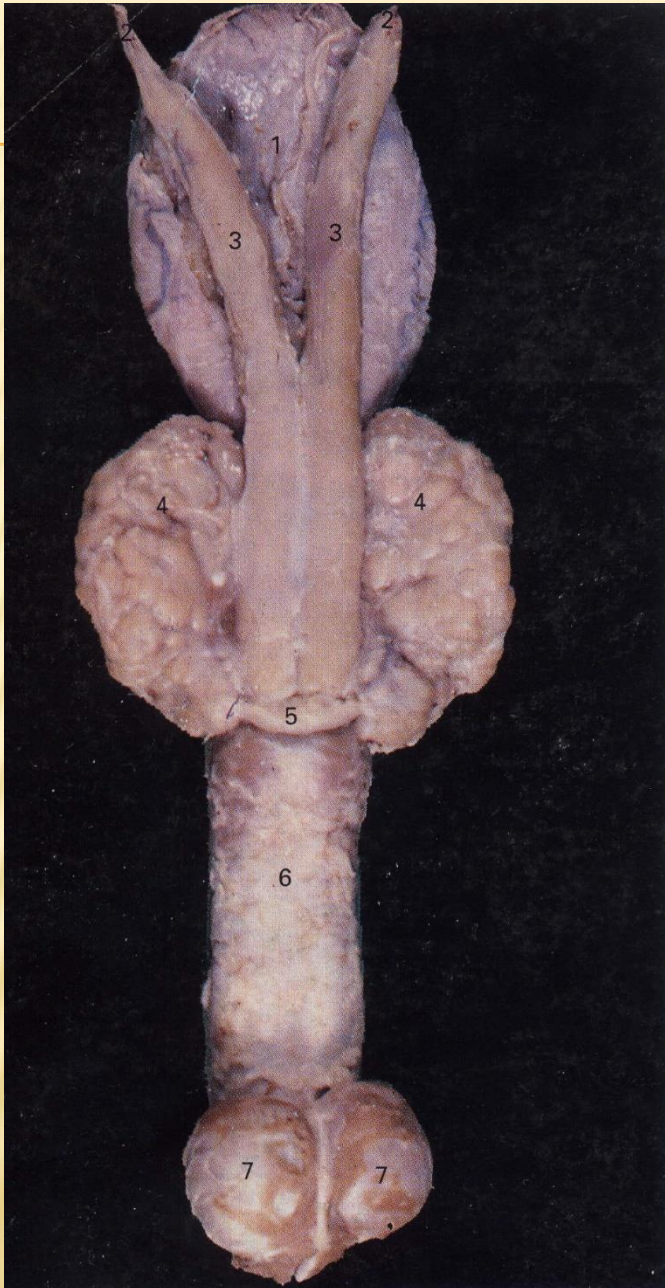


Figure 5–50 Ventral view of the opened bladder and urethra of a stallion. 1, Ureter; 2, bladder; 3, ureteric orifice; 4, trigone of bladder; 5, urethral crest and seminal colliculus; 6, opening of ejaculatory duct; 7, multiple openings of prostatic ducts; 8, multiple openings of bulbourethral ducts; 9, vesicular gland; 10, prostate; 11, bulbourethral gland.



344. Dorsal view of the bladder, pelvic urethra and related structures in the stallion.

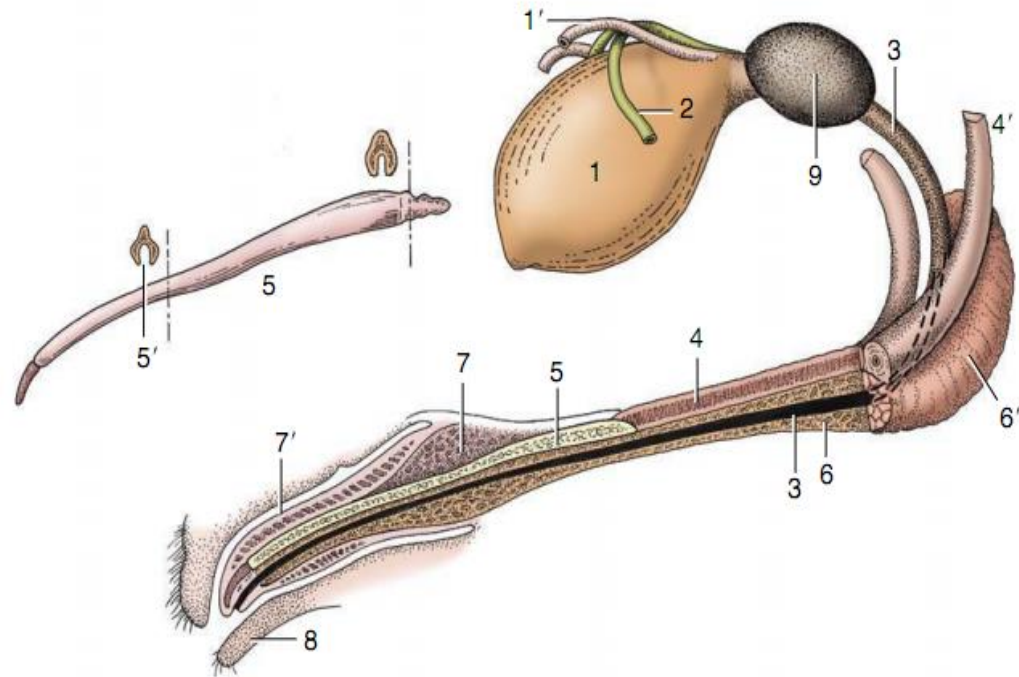
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|--|---|
| 1 Left ureter | 7 Pelvic part of the urethra surrounded by the urethral muscle |
| 2 Bladder, empty | 8 Left and right bulbourethral glands enclosed in urethral muscle |
| 3 Left and right deferent ducts | 9 Part of the bulb of the penis |
| 4 Ampullae | |
| 5 Left and right vesicular glands (seminal vesicles) | |
| 6 Left and right lobes of the prostate gland | |



360. Dorsal view of the male accessory glands of a ram: formalin fixed specimen.

- | | |
|--------------------------|--|
| 1 Bladder | 6 Pelvic urethra showing the tendinous part of the urethral muscle on its dorsal surface |
| 2 Deferent duct | 7 Bulbourethral glands |
| 3 Ampullae | |
| 4 Vesicular glands | |
| 5 Connective tissue band | |

Penis



Canine bladder, urethra, and penis (in section). 1, Bladder; 1', left ureter; 2, left deferent duct; 3, urethra; 4, corpus cavernosum; 4', left crus; 5, os penis; 5', urethral groove; 6, corpus spongiosum; 6', bulb of penis; 7, bulbous glandis; 7', pars longa glandis; 8, prepuce; 9, prostate.

Erectile tissue

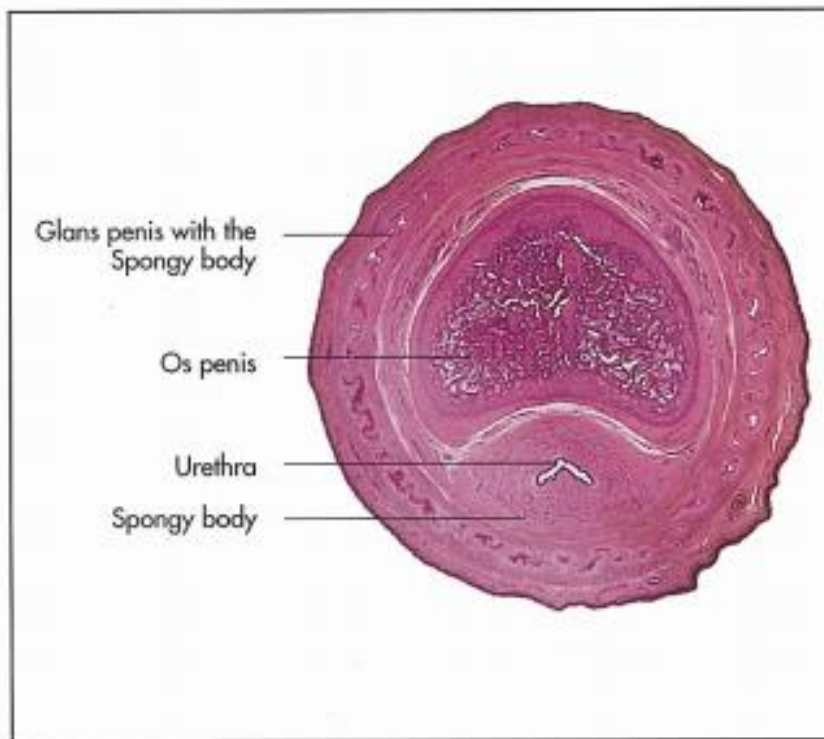


Fig. 10-30. Transverse section of the penis of a dog.

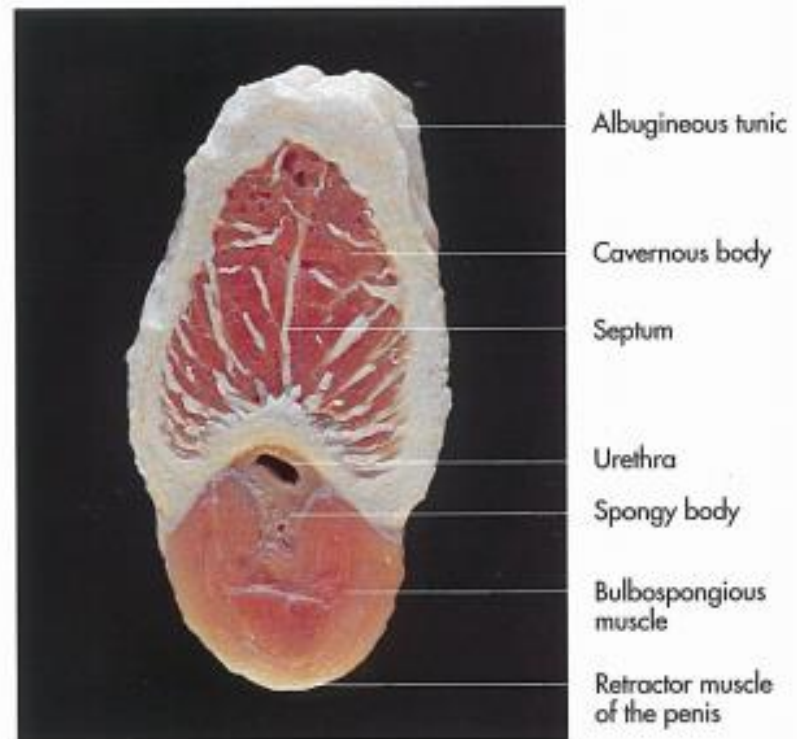
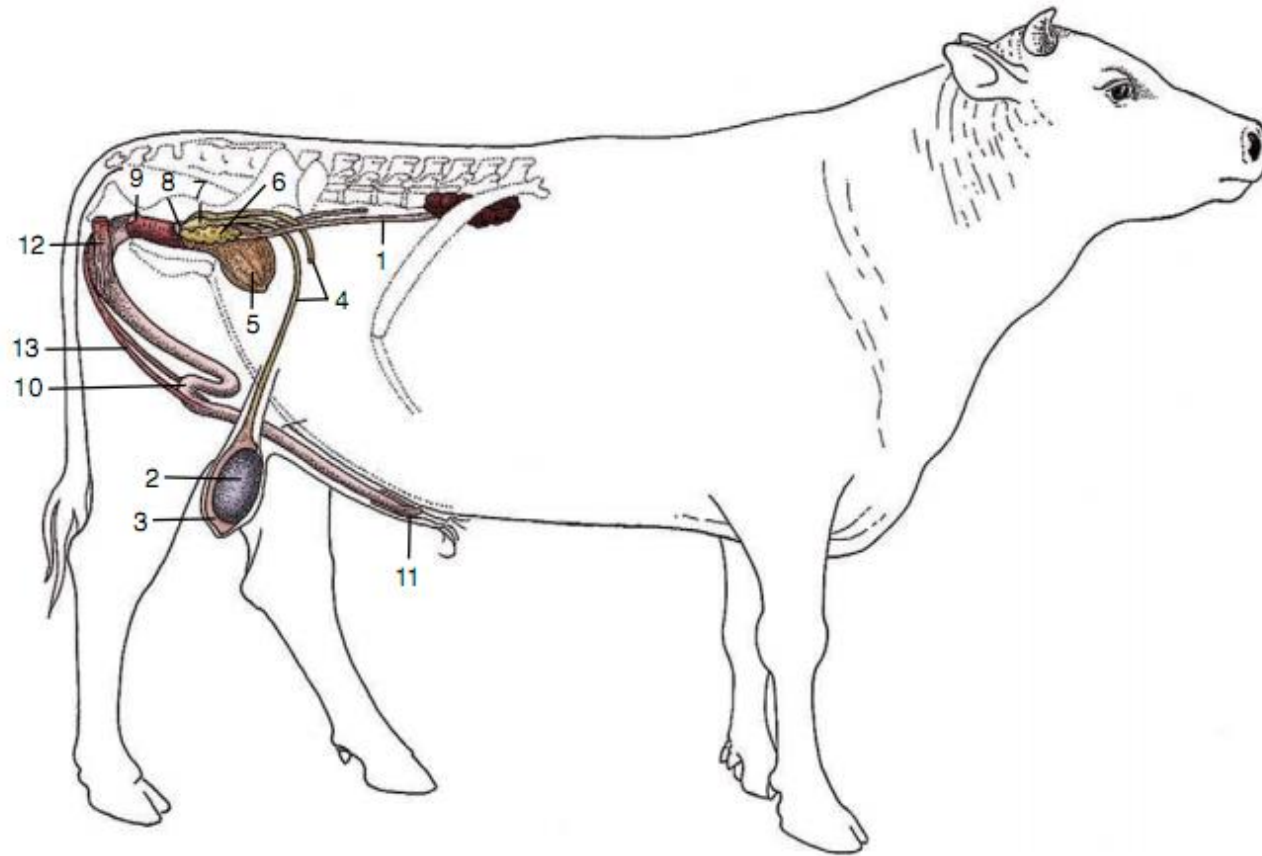


Fig. 10-31. Transverse section of the penis of a stallion.



1, Ureter; 2, right testis; 3, epididymis; 4, deferent duct; 5, bladder; 6, vesicular gland; 7, ampulla of deferent duct; 8, body of prostate; 9, bulbourethral gland; 10, sigmoid flexure of penis; 11, glans penis; 12, ischiocavernosus; 13, retractor penis.

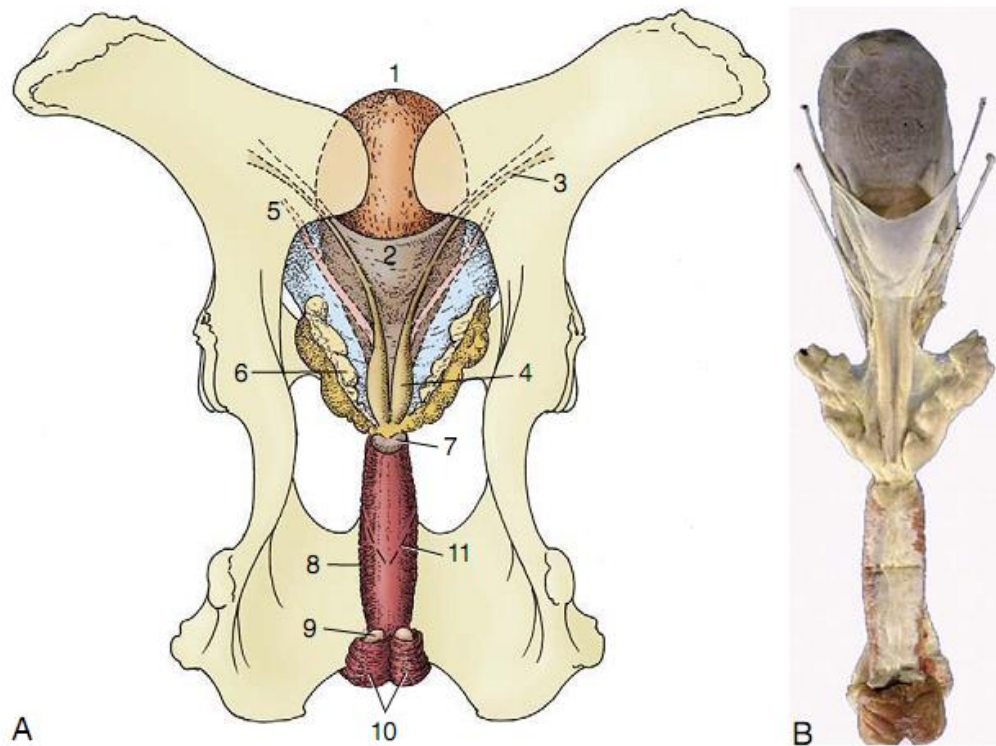


Figure 29–29 Dorsal view of the bull's pelvis and related urogenital organs. **A**, Schema. 1, Bladder; 2, genital fold; 3, right deferent duct; 4, ampulla of deferent duct; 5, left ureter; 6, vesicular gland; 7, body of prostate; 8, urethralis (surrounding urethra); 9, bulbourethral gland; 10, bulbospongiosus; 11, caudal extent of the rectogenital pouch (*broken line*). **B**, Specimen.



Figure 29–32 The fibroelastic bovine penis and its retractor muscle. 1, Sigmoid flexure; 2, retractor penis muscle; 3, preputial skin.

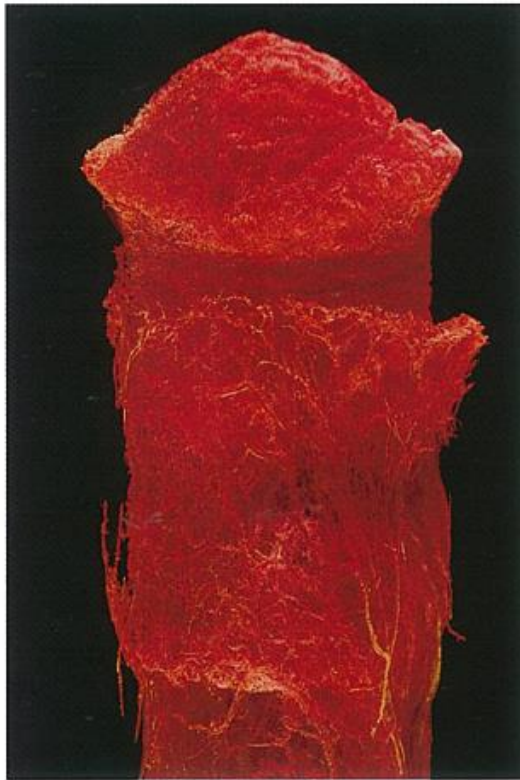


Fig. 10-32. Blood vessels of the apex of the penis of a stallion, corrosion cast.



- Urethral process
- Fossa of the glans
- Corona of the glans
- Collum of the glans
- Preputial fold
- Prepuce

Fig. 10-33. Apex of the penis of a stallion.

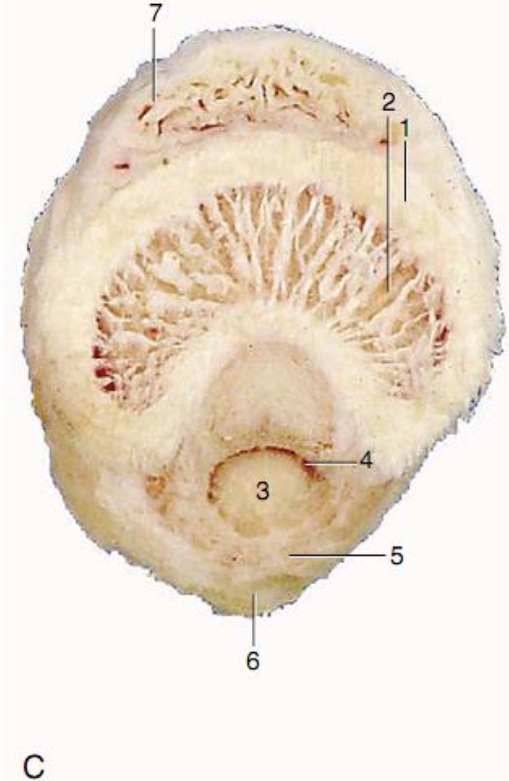
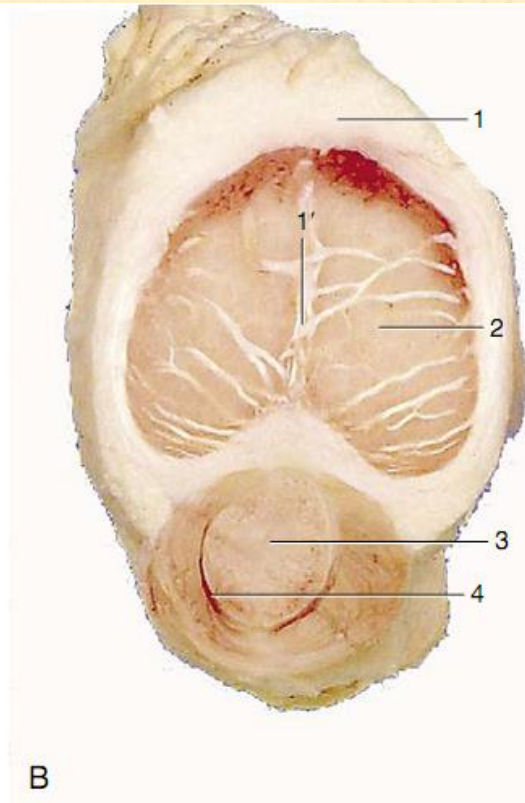
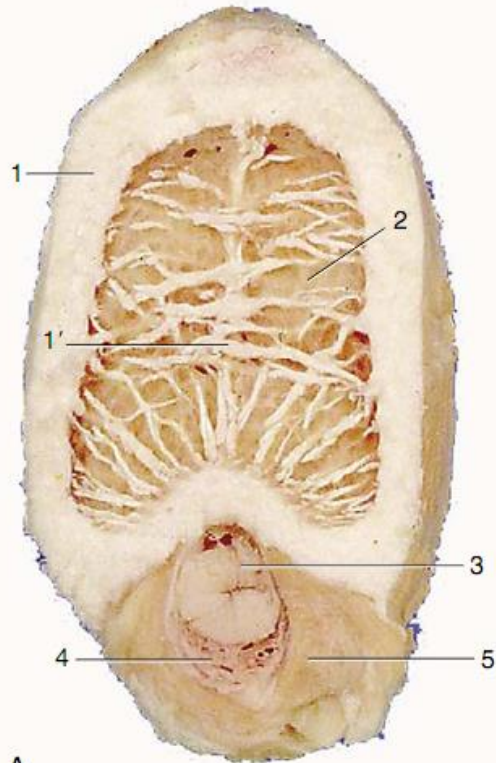
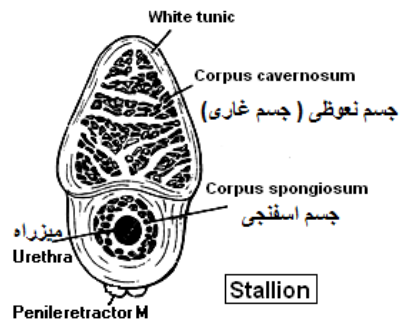


Figure 22–21 Transsections of the penis, directly distal to the root (A), midshaft (B), and in its free part (C). 1, Tunica albuginea; 1', incomplete septum penis; 2, corpus cavernosum; 3, urethra; 4, corpus spongiosum; 5, bulbospongiosus; 6, retractor penis; 7, dorsal process of glans.

Urethral process

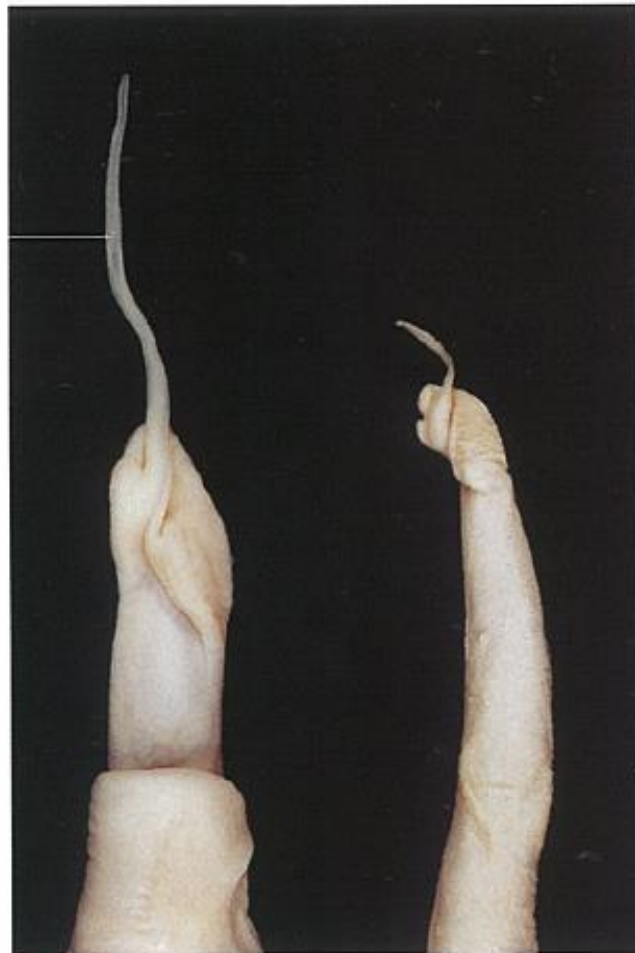
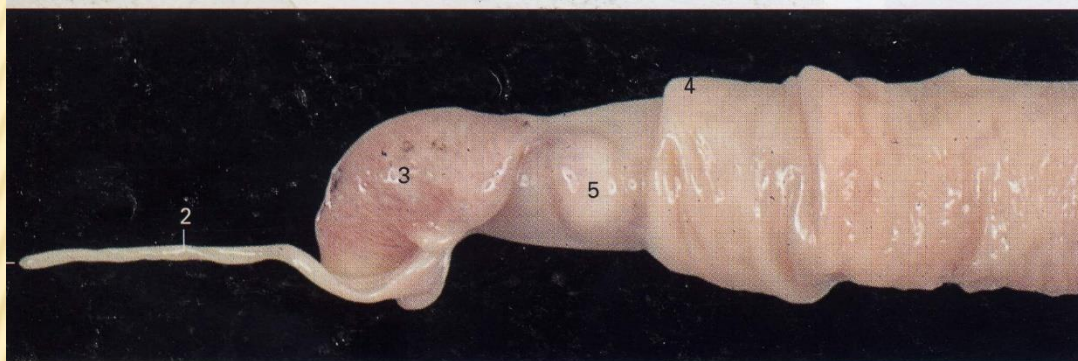


Fig. 10-28. Apex of the penis of a sheep (left) and a goat (right).



Fig. 10-29. Apex of the penis of a bull.



361. Distal part of the penis of a ram seen from the left. The areas of melanin pigmentation are normal in sheep.

- | | |
|------------------------------------|--|
| 1 Position of the urethral opening | 4 Point of reflection of the prepuce; the prepuce has not been fully everted |
| 2 Urethral process | 5 Spongy tubercle |
| 3 Glans | |



362. Distal part of the penis of a ram seen from the right.

- | | |
|--|--|
| 1 Spongy tubercle | 6 Course of the urethra and the surrounding spongy erectile tissue (corpus spongiosum) is shown by the oblique dark line |
| 2 Glans | 7 Point of reflection of the mucosa; the prepuce has not been fully everted |
| 3 Position of the urethral opening | |
| 4 Urethral process | |
| 5 Proximal end of the urethral process | |

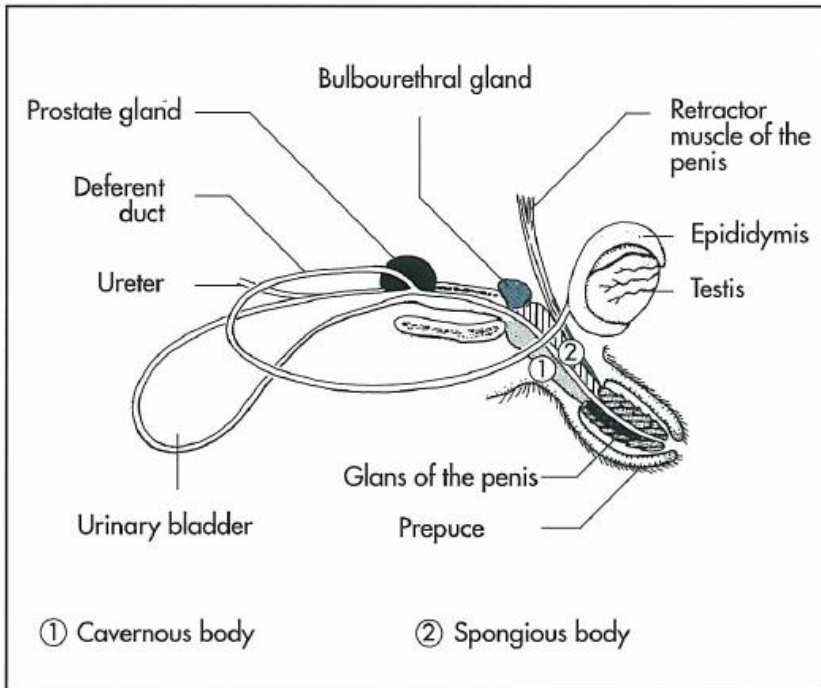


Fig. 10-1. Genital organs of the male cat, schematic.

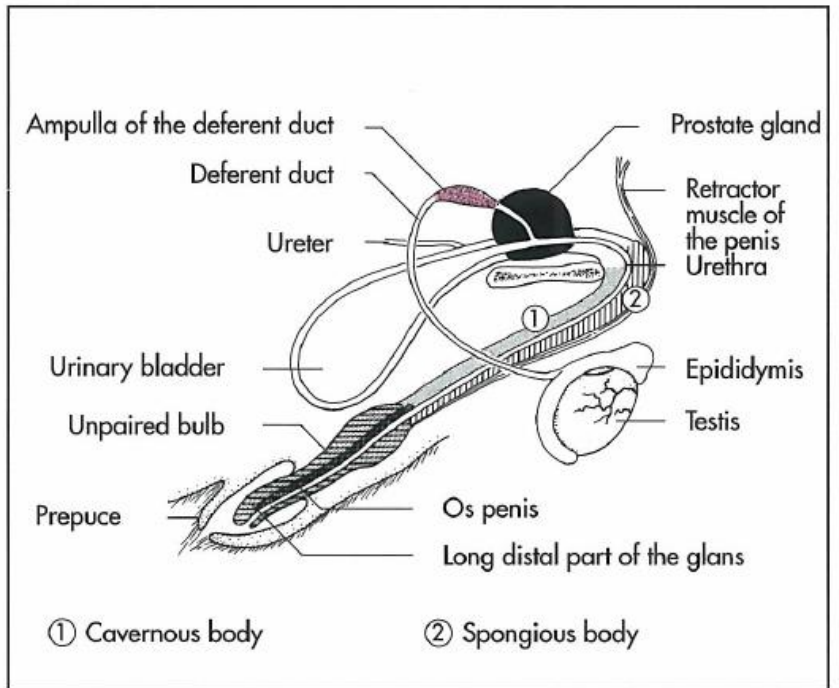
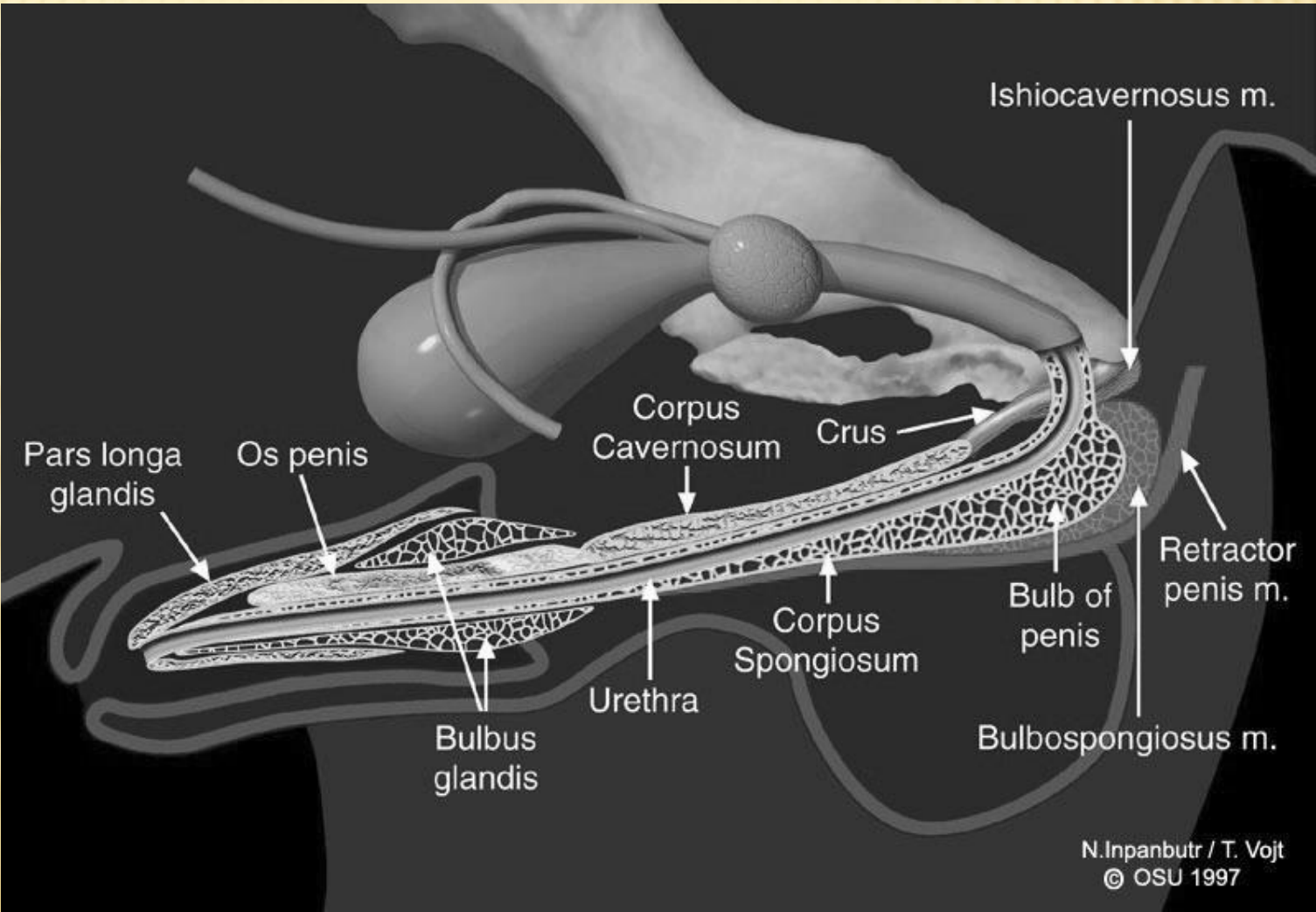
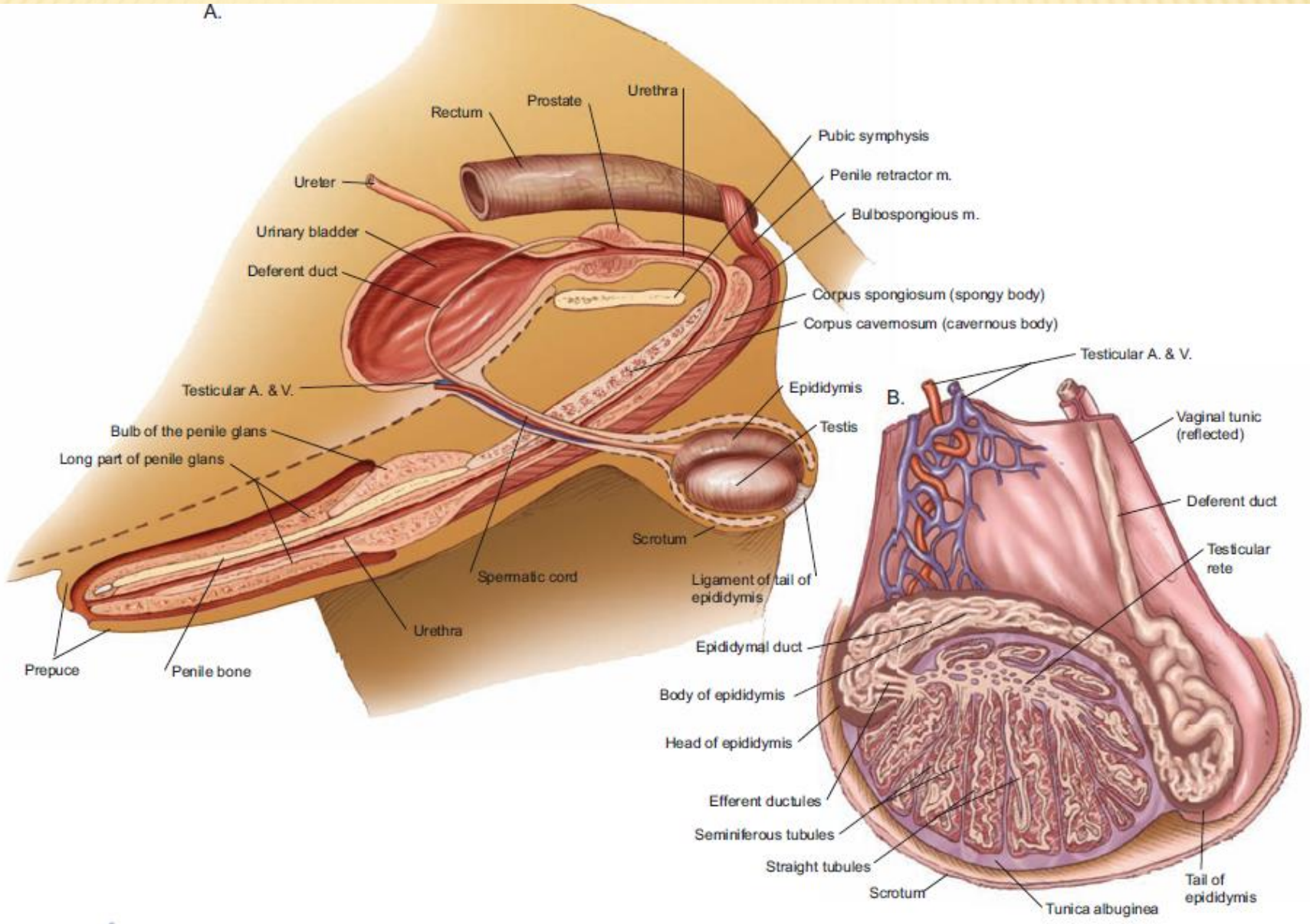


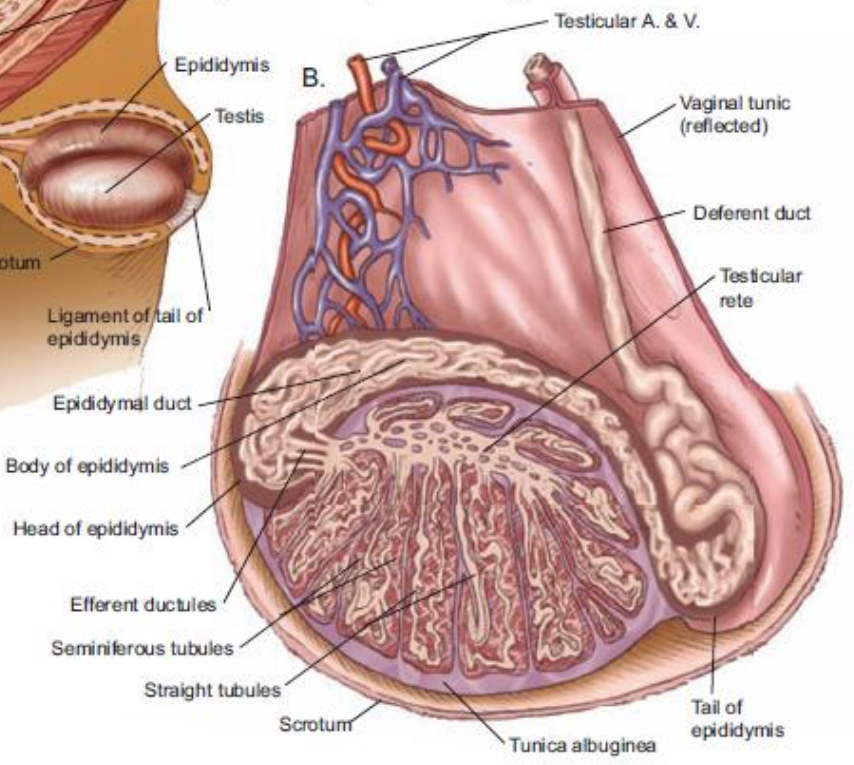
Fig. 10-2. Genital organs of the male dog, schematic.



A.



B.



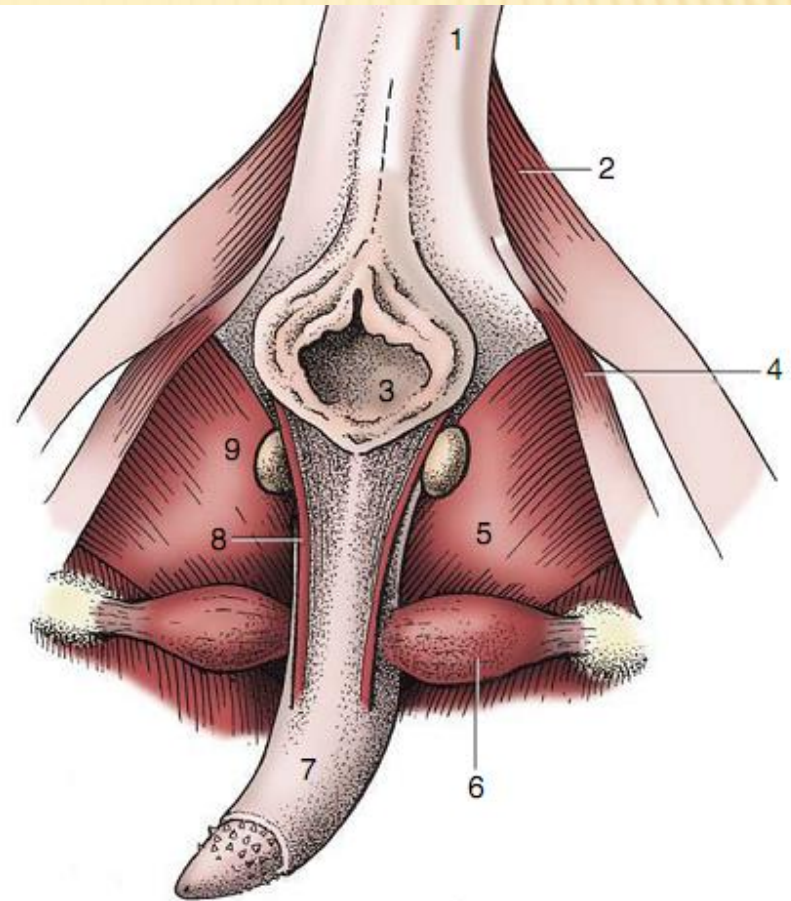
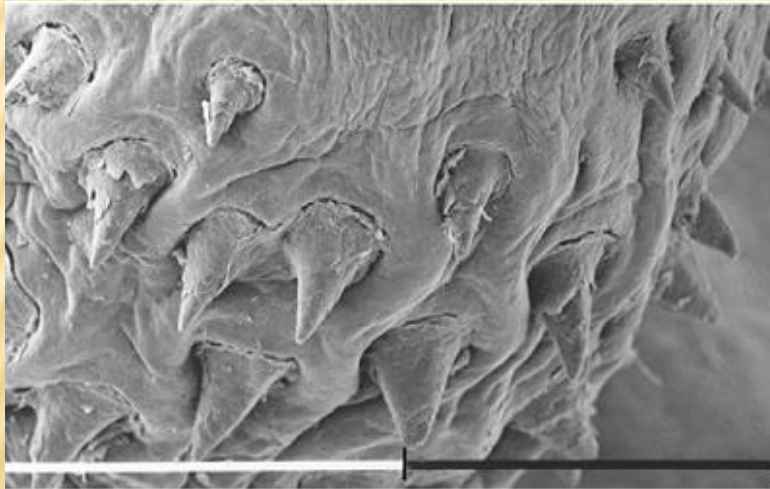
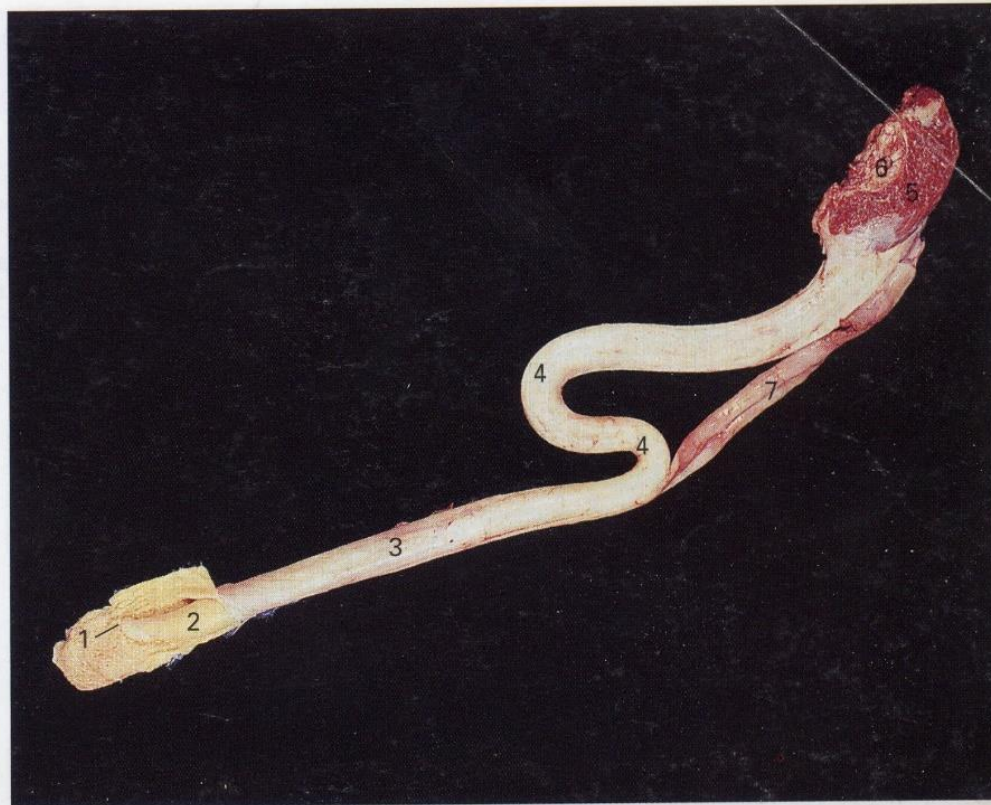


Figure 15–24 Feline penis in situ, caudal view. 1, Tail (raised); 2, gluteofemoralis; 3, anus; 4, coccygeus; 5, internal obturator; 6, ischiocavernosus; 7, penis; 8, left retractor penis; 9, left bulbourethral gland.

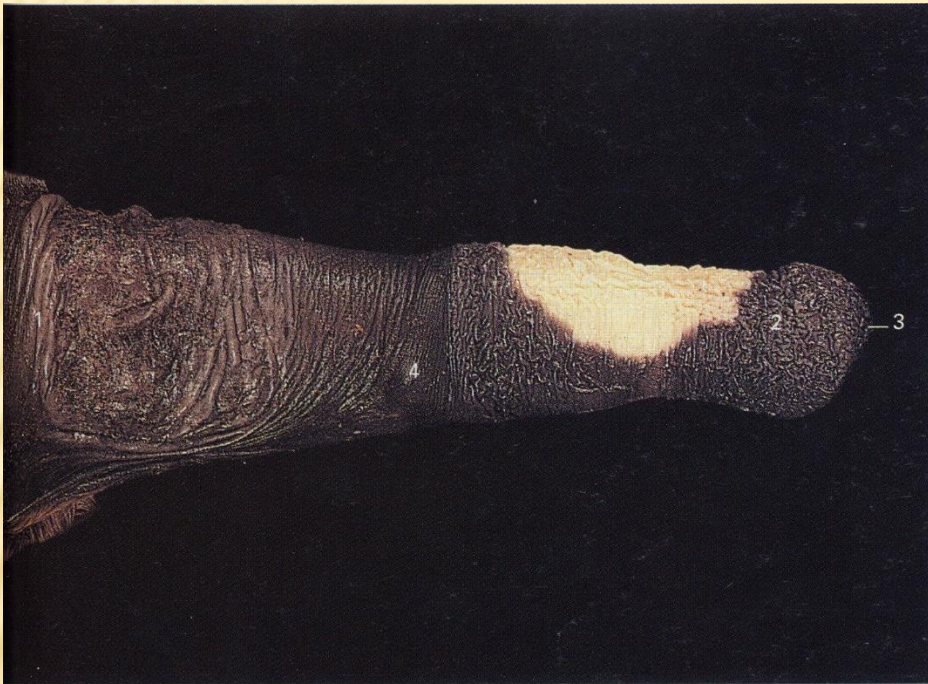
Penile muscles



357. Left lateral view of the bovine penis.

- | | |
|---|--|
| 1 Distal end of the penis | 5 M. ischiocavernosus |
| 2 Free mucosa-covered part of the body of the penis | 6 Tunica albuginea surrounding the cavernous erectile tissue |
| 3 Distal part of the body of the penis | 7 M. retractor penis |
| 4 Sigmoid flexure | |

Prepuce



345. Right view of the free part of the penis of the horse. The prepuce has been everted. In this animal the penis had a large unpigmented area on its dorsal side.

- 1 Position of the preputial opening when the penis is retracted
- 2 Edge of the corona of the glans
- 3 Position of the urethral opening

- 4 Position of the preputial fold when the penis is retracted; it bears the vestigial nipple of the male



346. Ventral view of the free part of the penis of the horse. The prepuce is only partially everted.

- 1 Position of the preputial fold when the penis is retracted
- 2 Corona of the glans
- 3 Urethral process lying within the fossa glandis

- 4 Position of the urethral opening
- 5 Position of the preputial opening when the penis retracted

GOOD JOB!

