

Anatomy

MALE REPRODUCTIVE SYSTEM

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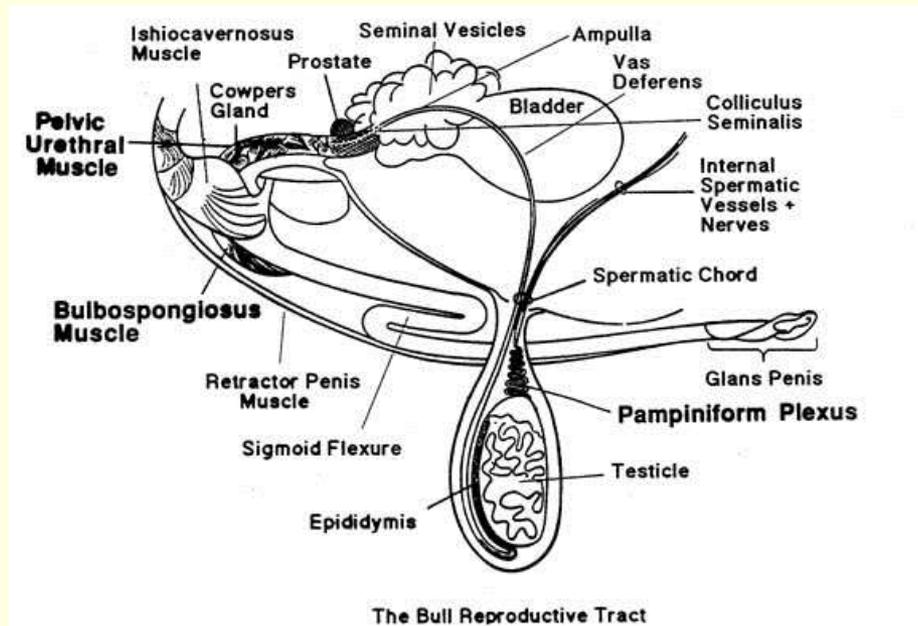
MUSCLE OF THE PENIS

1- bulbo spongiosus (single)

Origin: its direct continuation of urethralis muscle and surrounded the pulp of penis and urethra.

Insertion: tunica albugena of the pulp of penis

Action: the contraction of this muscle lead to increase pressure in the urethra to excretion the semen during the ejaculation.

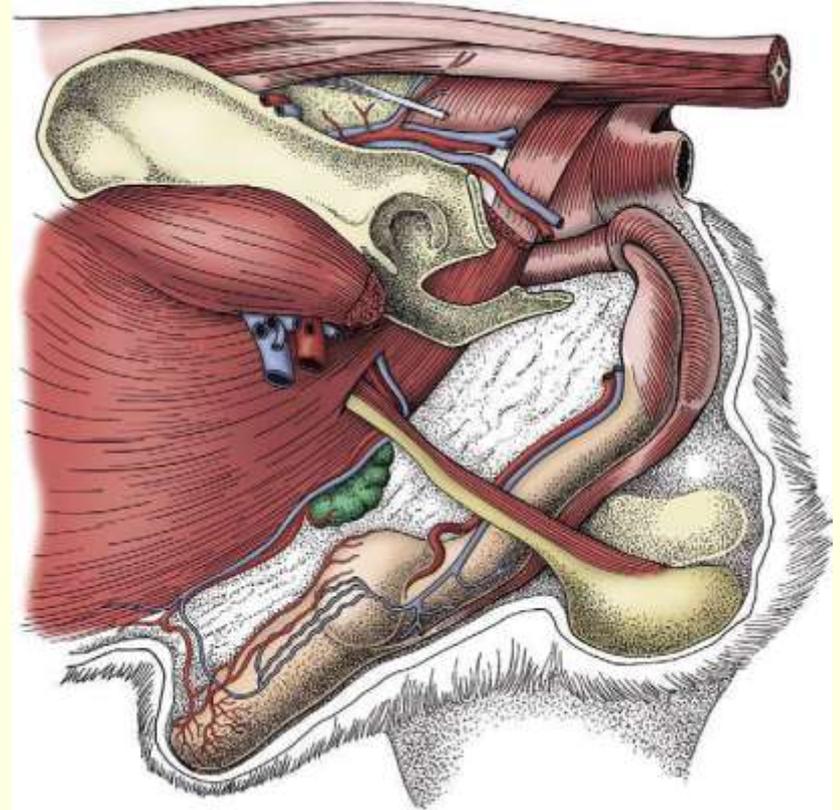


2- Ischio cavernous muscle:

Origin: from the ischal arch and surrounded the crura .

Insertion: tunica albugenea of the root of penis .

Action: pumping action of these muscle lead to increase blood inside the corpus cavernous muscle.

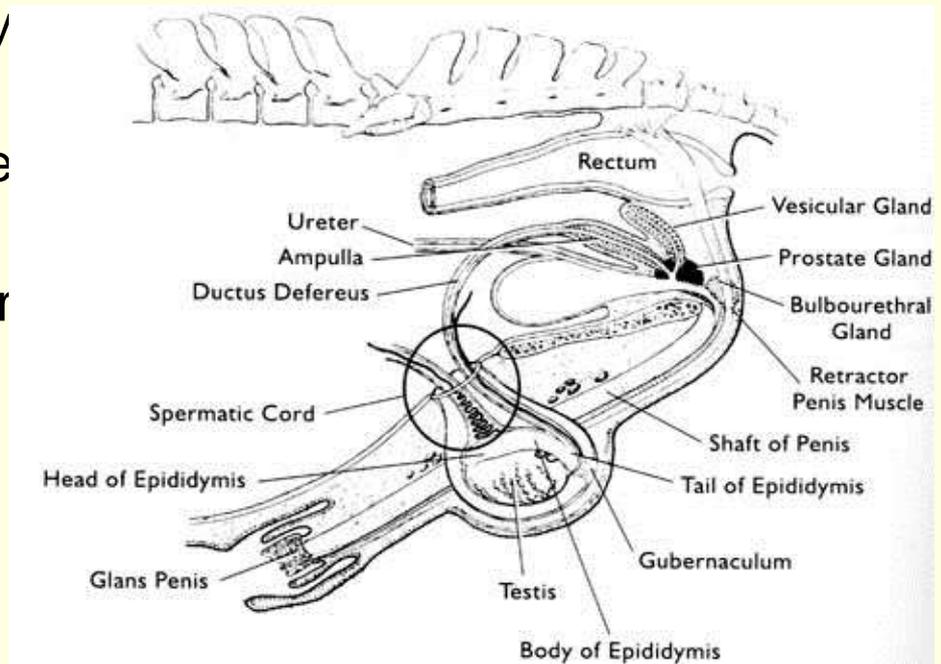


Retractor muscle of penis:

Origin :from the ventral surface of the first coccygeal vertebra and the two muscle surrounded the anus to formed suspensory ligament.

Insertion: tunica albugena of the free part.

Action: retract the penis after ejaculation.



Blood supply

Penis: the penis is supplied by:

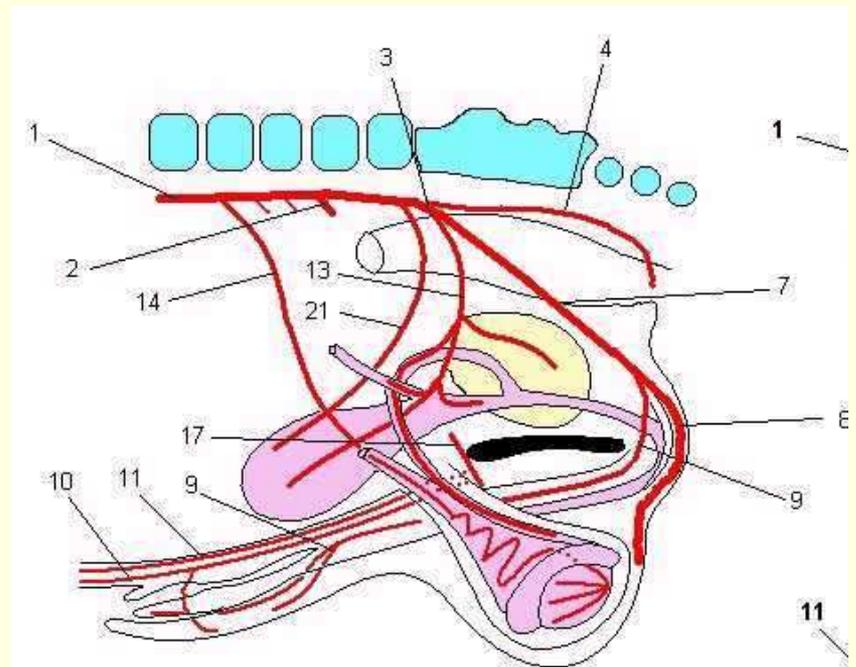
1- internal pudendal artery:

Which give artery of penis called caudal artery of penis. And divided into two artery dorsal penis artery and deep penis artery.

2- external pudendal artery:

Cranial artery of penis.

3- obturator artery (middle artery of penis



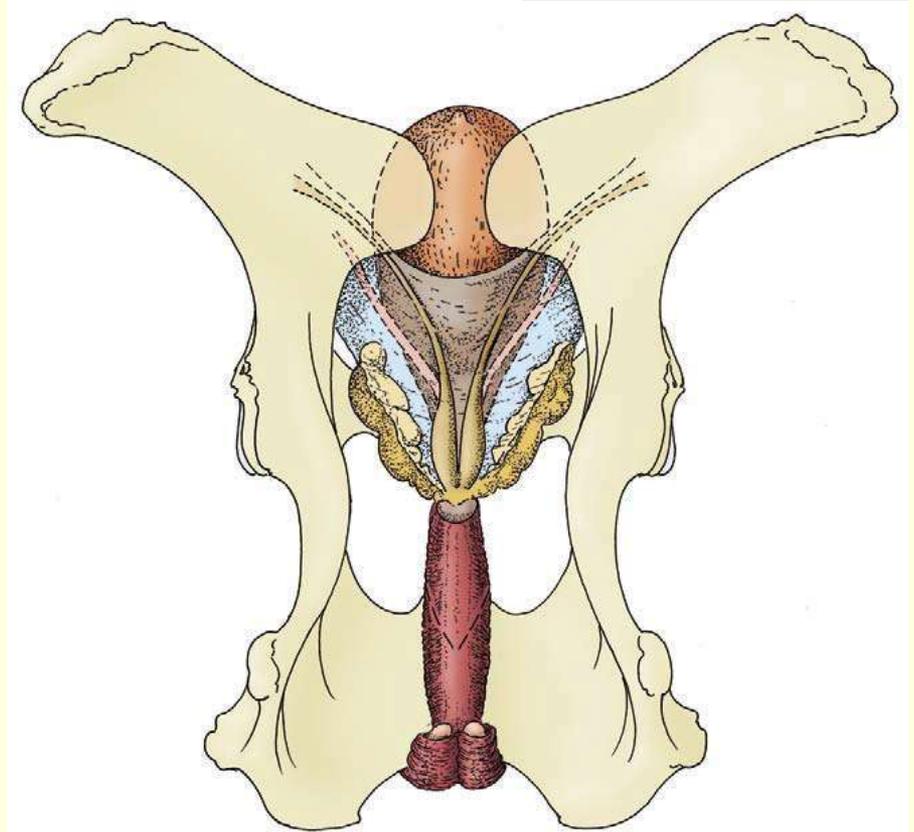
Nerve supply of penis

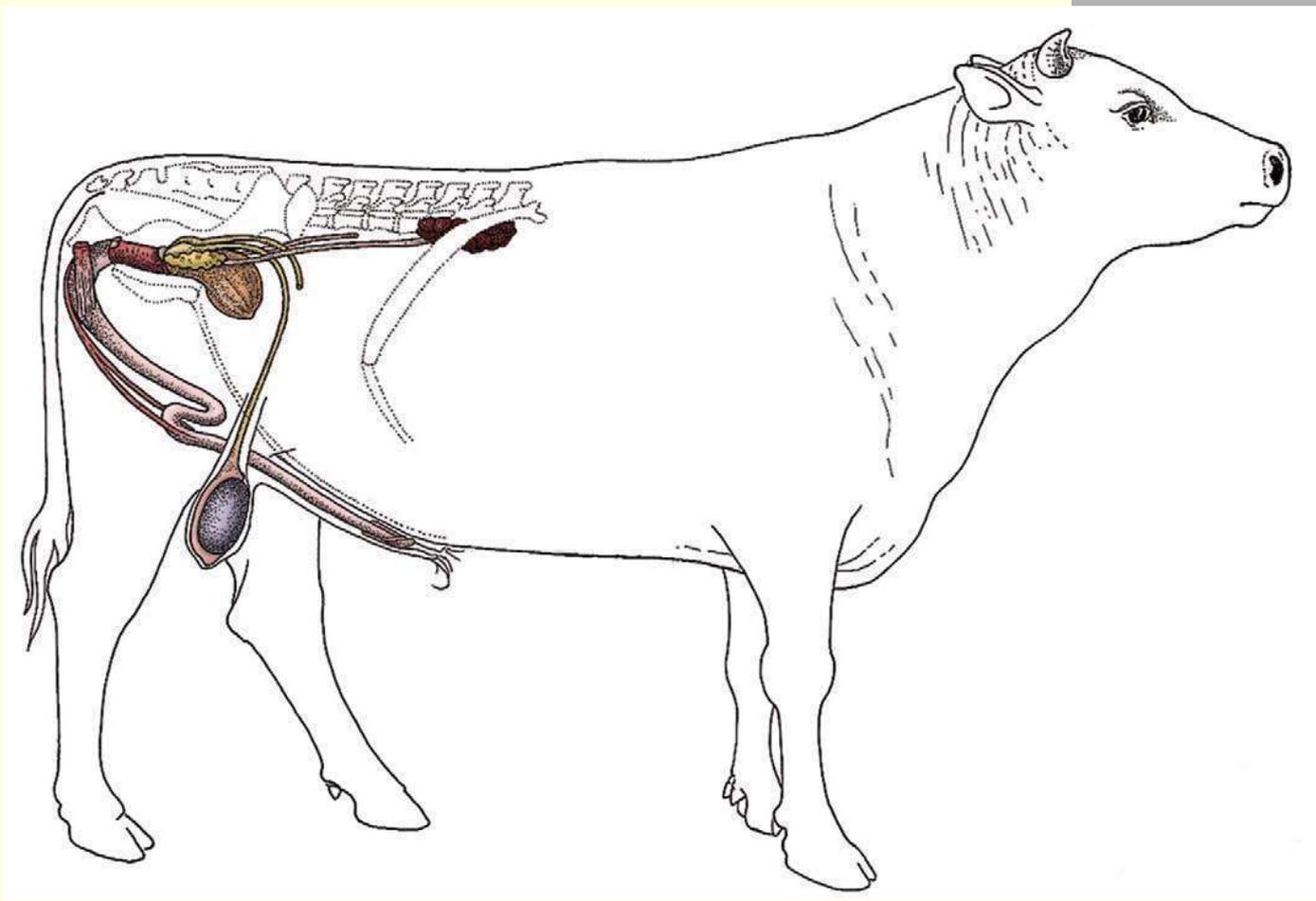
- 1-Pudendal nerve supply penis and its muscle.
- 2-ileo hypogastric, ileo inuinal, genitofemoral supply testis and scrotum

Accessory sex glands

They are group of glands are associated with pelvic urethra and empty there product on the spermatozoo in the pelvic urethra, the combination as semen, these glands are:

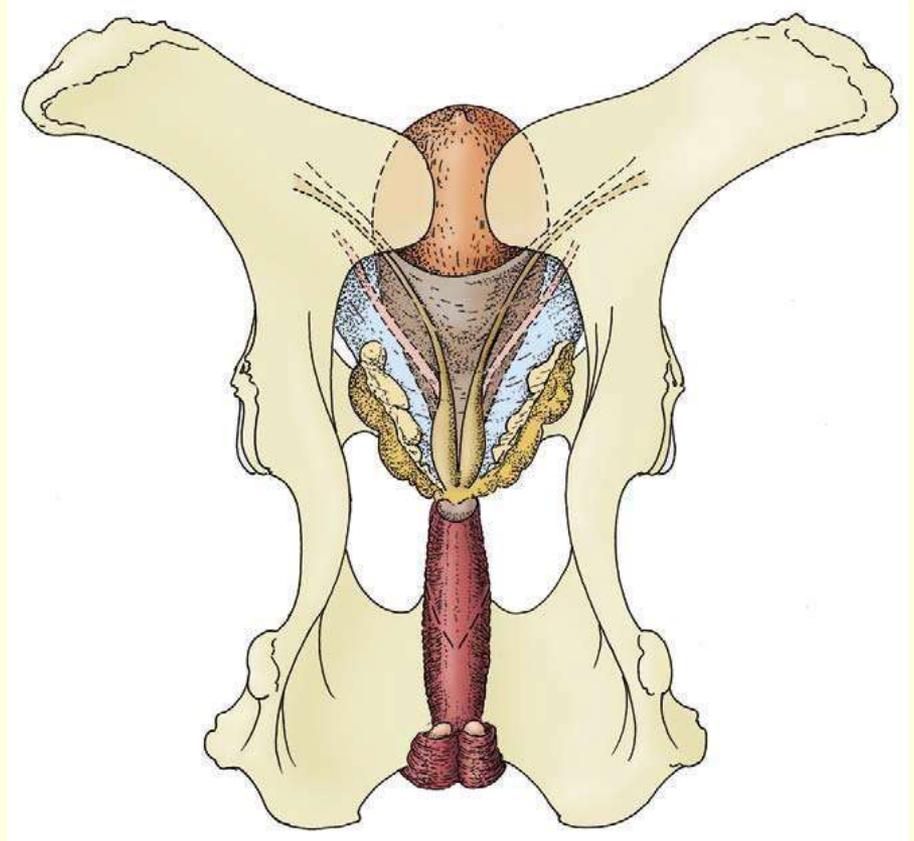
- 1-prostate
- 2- ampulla ductus deference
- 3- seminal vesicle.
- 4-bulbourethral gland.





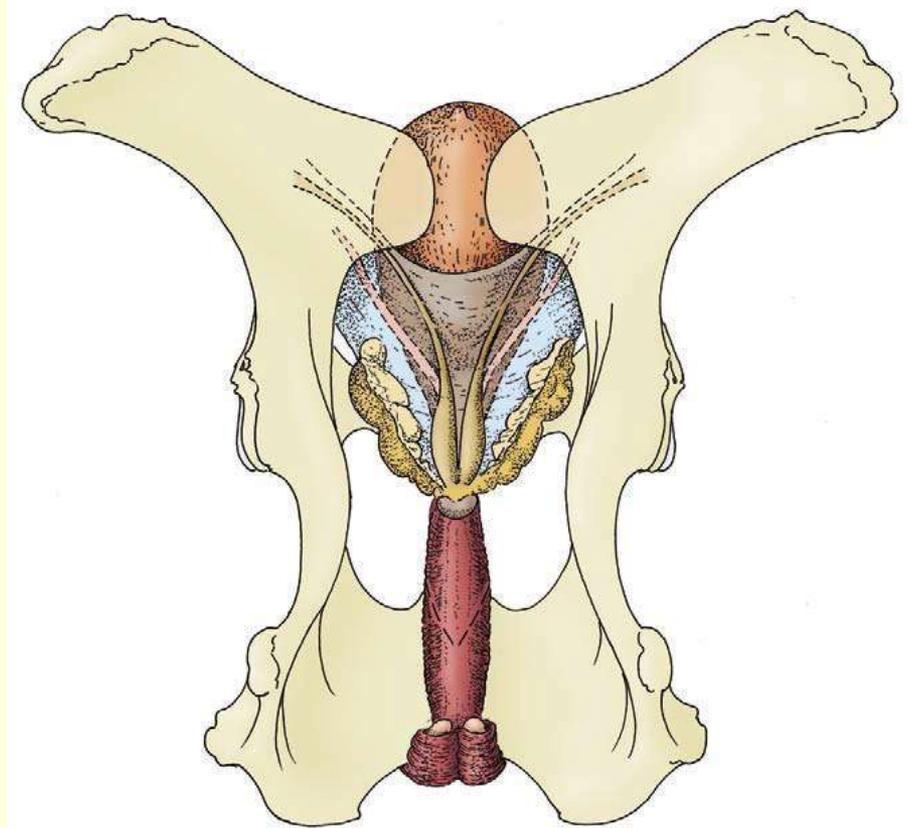
Accessory sex glands

1-prostate: its present in all animals and consist of body and disseminated part.



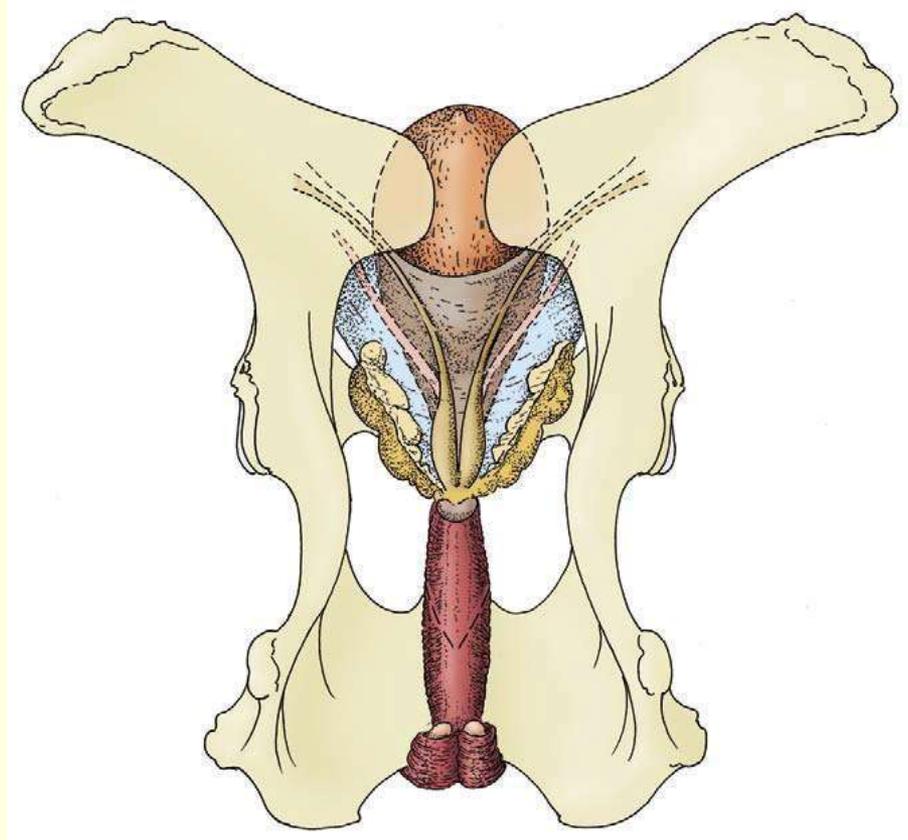
Accessory sex glands

2- ampulla ductus deference :
Thickness of the terminal part of ductus deference containing glandular tissue in there wall.



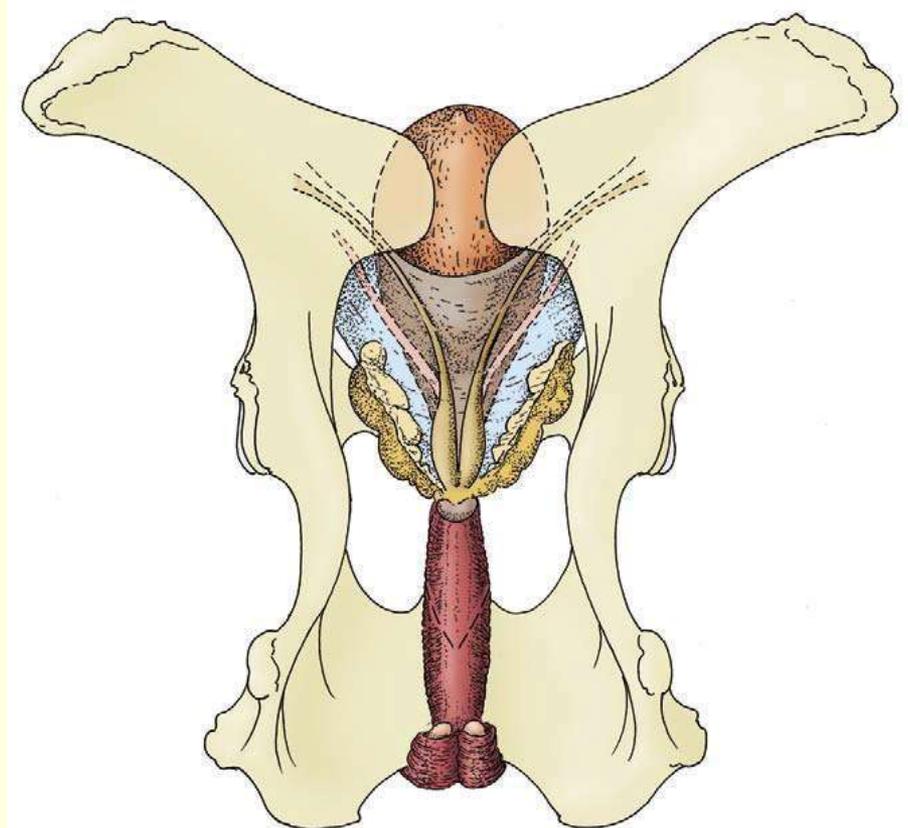
Accessory sex glands

3- seminal vesicle: these gland lie on the dorso-lateral surface of the urinary bladder , its present in all animals except the dog, cat, camel.



Accessory sex glands

4-bulbourethral gland: it is lie on distal part of the pelvic urethra in the horse each gland have several ducts , other animals each gland has one duct



Mechanism of erection

- 1- erection is under parasympathetic nervous system control.
- 2-Ccp is consider as closed system.
- 3- during stimulation there is increased blood pressure especially in the vessels directed to the male genital system.
- 4- pumping action of the ischio cavernous muscle lead to push blood inside ccp and in the same time closed the vein to prevent blood return.
- 5- these lead to increase blood pressure inside ccp which lead to a- increase rigidity and elongation and b- in fibro elastic type lead to stretched of sigmoid flexure.
- 6- after ejaculation there is back feed mechanism :
 - A- decrease blood pressure.
 - B- stop action of ischio cavernous muscle.
 - C- the penis return inside prepuce
- Back mechanism is under sympathetic control.

Ejaculation

- It is peristaltic movement begin at the tail of epididymis, vas deference and to peristaltic waves in corpus spongiosus penis.