

Preputium

The prepuce (foreskin) is the retractile covering of the glans penis.

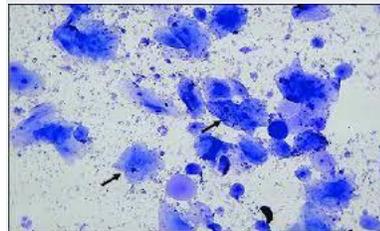
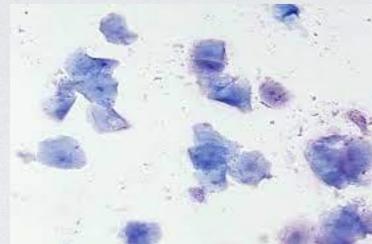
Naturally attached to penis

Protection, Sebaceous glands, Immune function



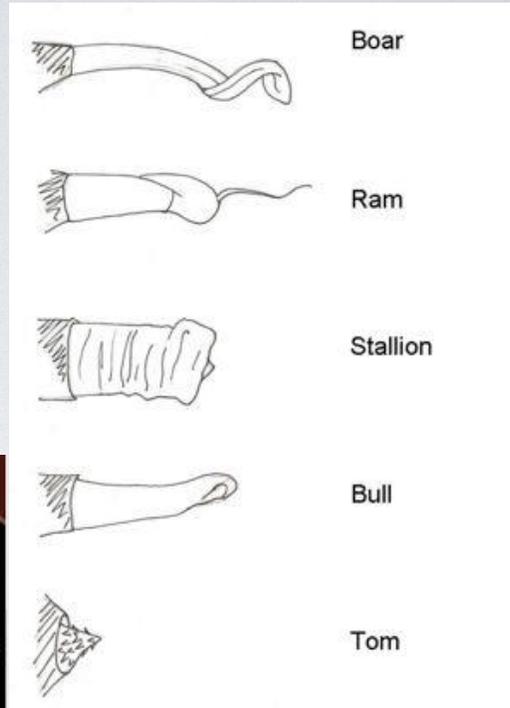
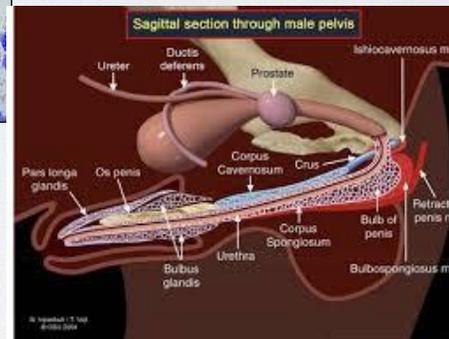
Desirable sheath

Loose, undesirable sheath



Penis

Cavernous or fibroelastic shape
coital and urination organ



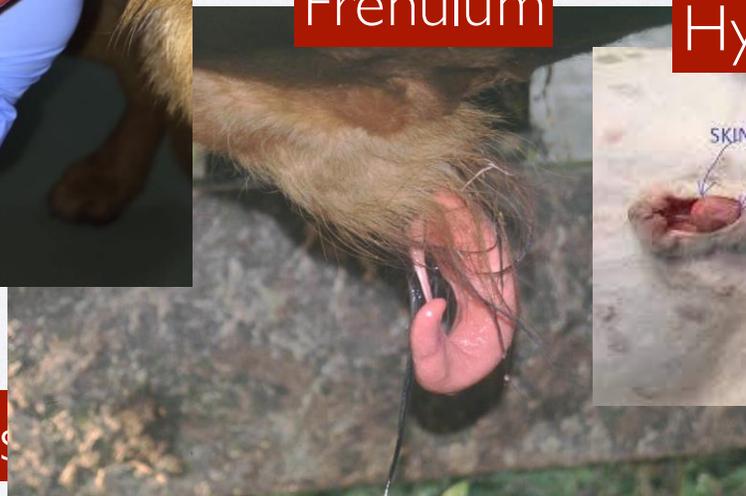
Congenital



Posthitis + Balanitis = Balanoposthitis

Frenulum

Hypospadias

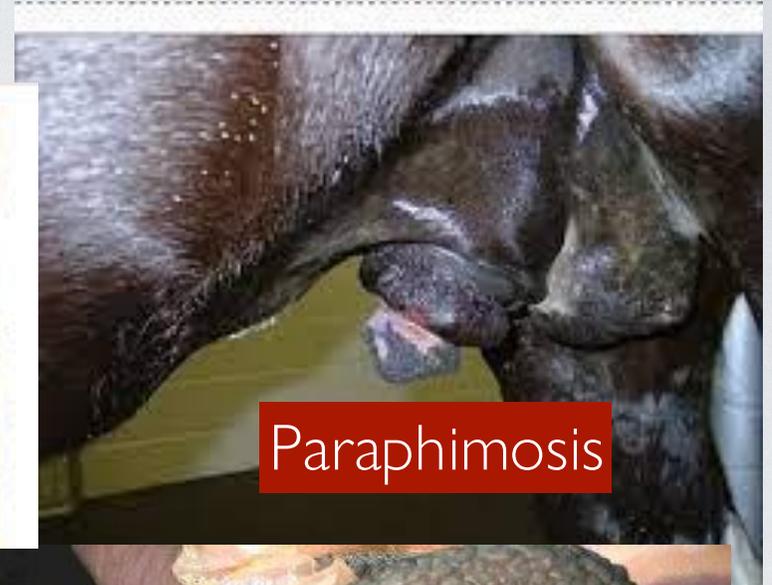
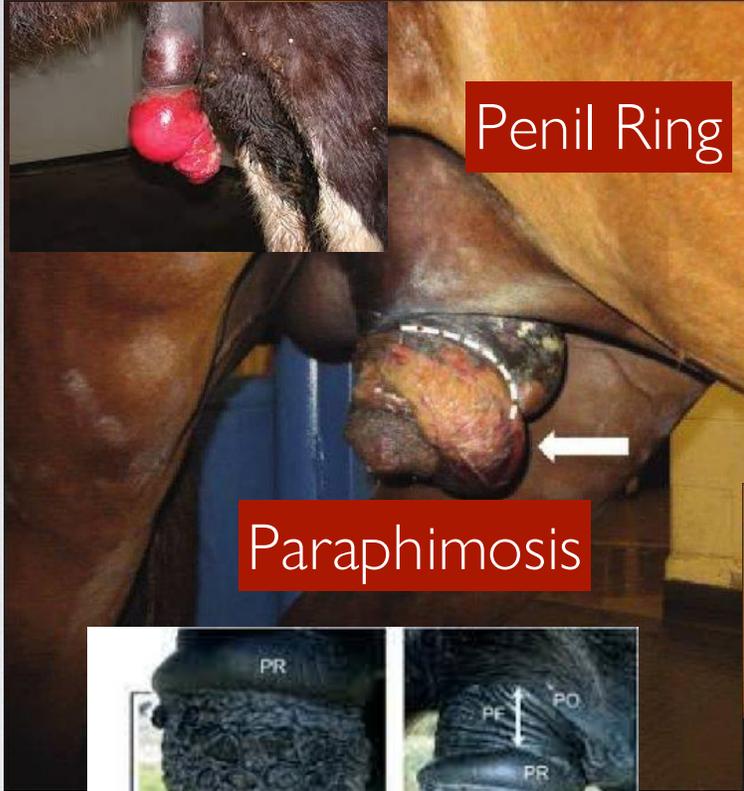


Penil Hypoplasia



Phimosis is the inability of a horse to protrude its penis from the sheath

Paraphimosis is the inability of the horse to retract its penis into the preputial cavity.



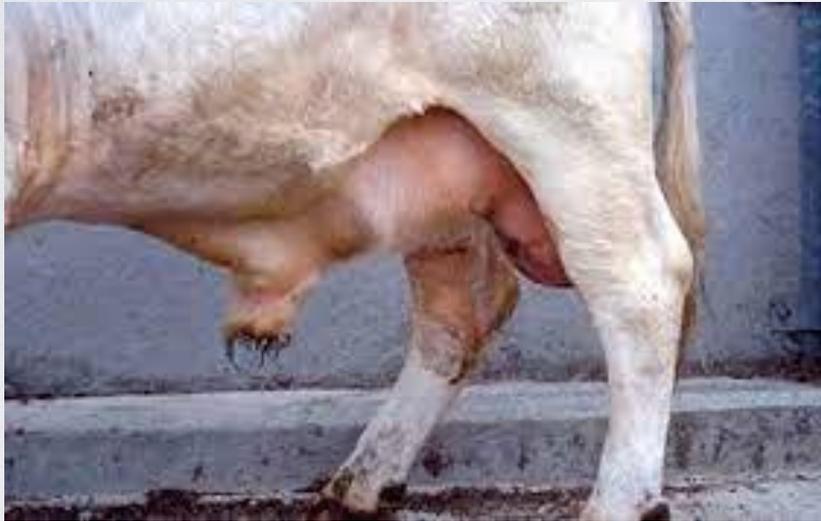
Fibro-Sarcom

Trauma

EHV-3 (Equine coital exanthema)



Idiopathic renal haematuria

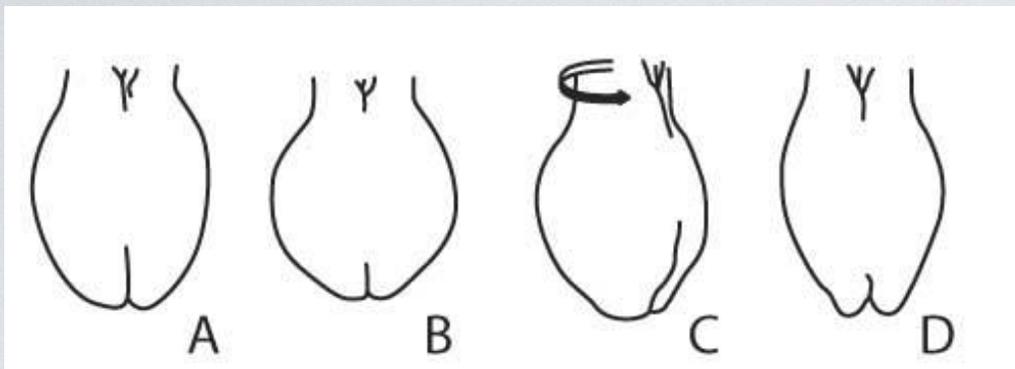


Urolithiasis

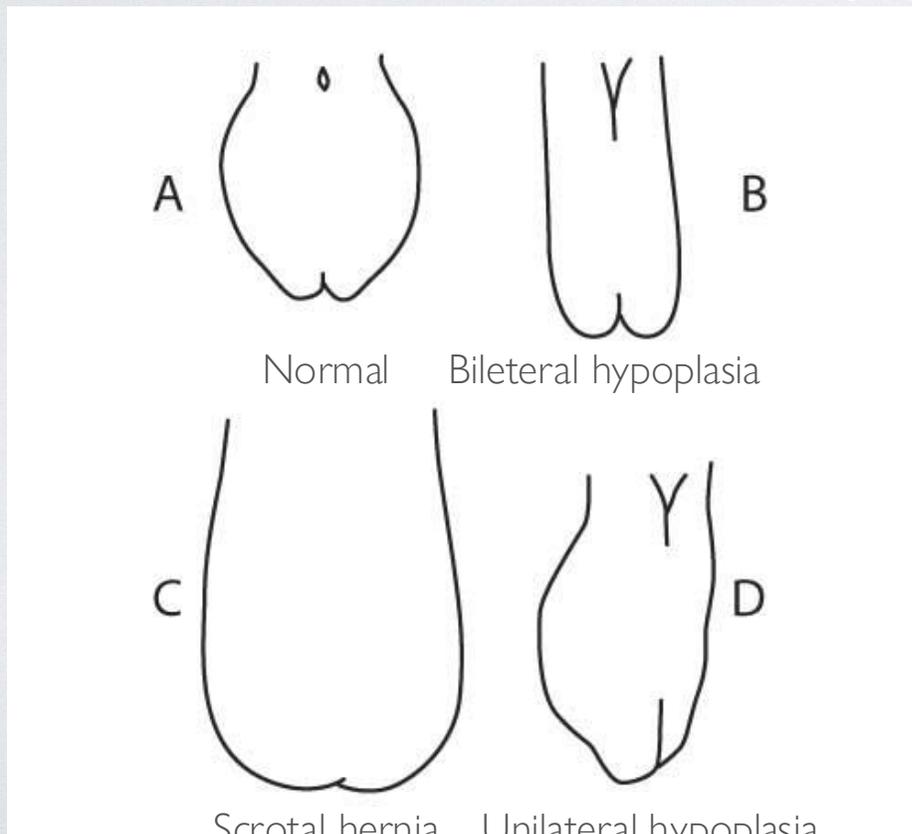


Pizzle rot

Scrotal Confirmation



Normal Normal ovoid Twisted Cleavage



Normal Bilateral hypoplasia Scrotal hernia Unilateral hypoplasia

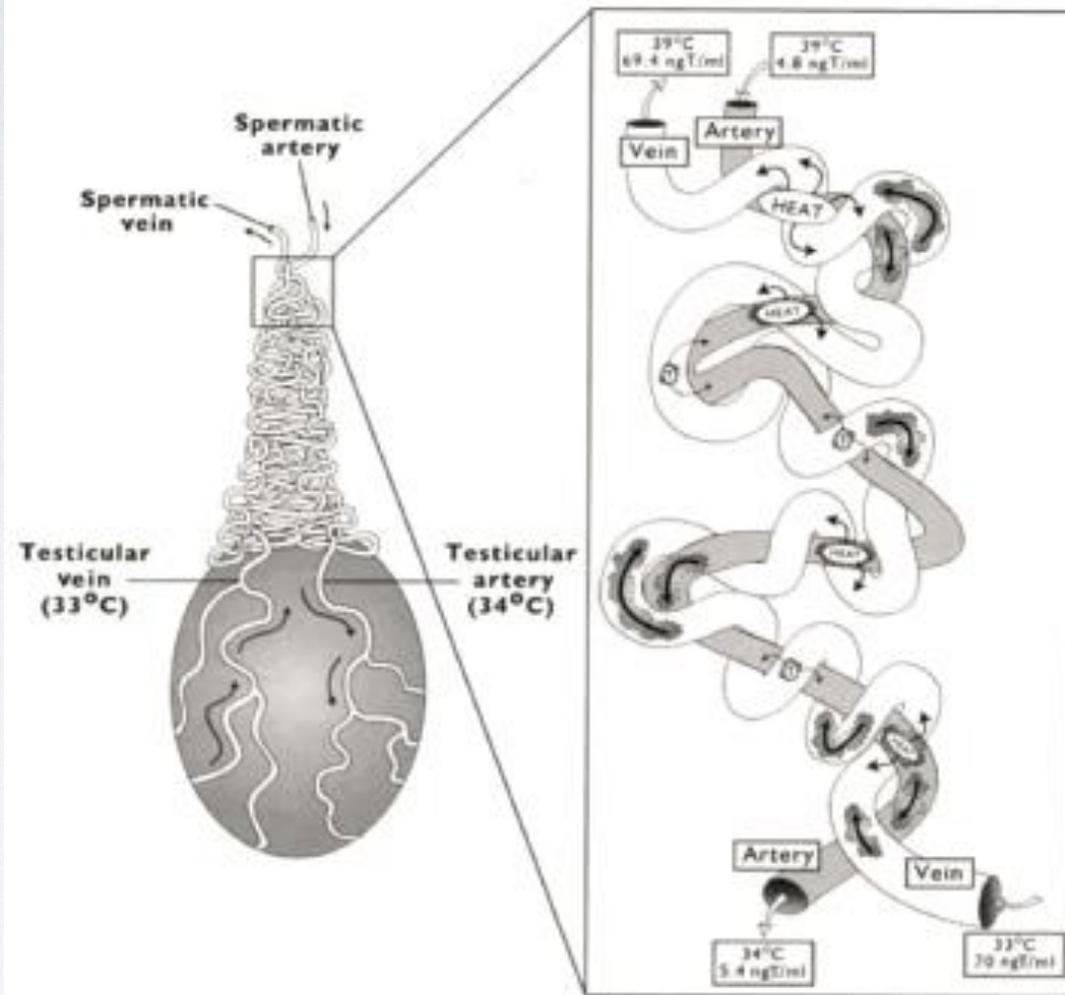
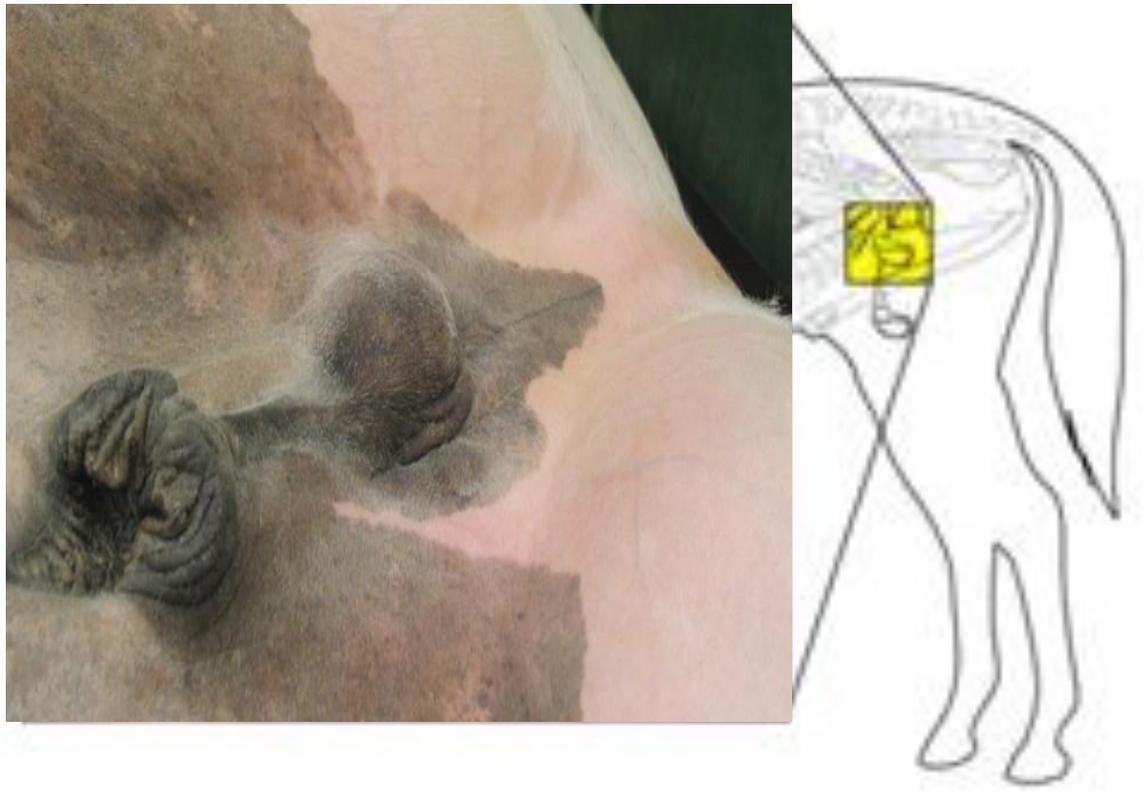


DIAGRAM SHOWING THE COOLING FUNCTION OF THE PAMPINIFORM PLEXUS (Texas A&M University)

Thermoregulation
4-6 C below the BT



Cryptorchidism

a condition in which one or both of the testes fail to descend from the abdomen into the scrotum

Testicular differentiation occurs by 36 days of gestation

Unilateral
Monolateral

Bilateral

Gubernaculum



If one or both testes are not in the scrotum, where are they?

Abdominal cavity

Inguinal canal

S.C. (outside the abdominal wall)

Normal testicular descent in the dog occurs in three steps: 1) movement through the abdominal cavity into the internal inguinal ring; 2) movement through and out of the inguinal canal; 3) movement from the inguinal canal to the scrotum. Descent may fail at any point in any one of these 3 stages.

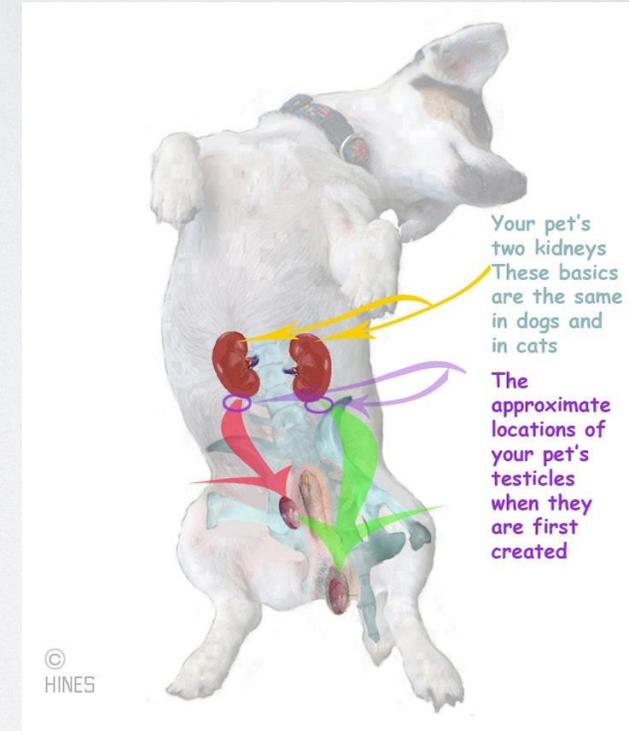
3 factors:

- 1) the sex chromosomes;
- 2) normal development of the ovaries or testicles;
- 3) normal development of the external genitalia (vulva, prepuce) and the effects of the sex steroid hormones on physical appearance (i.e. large jowls and increased size and muscling in males and finer facial features and smaller stature in females).



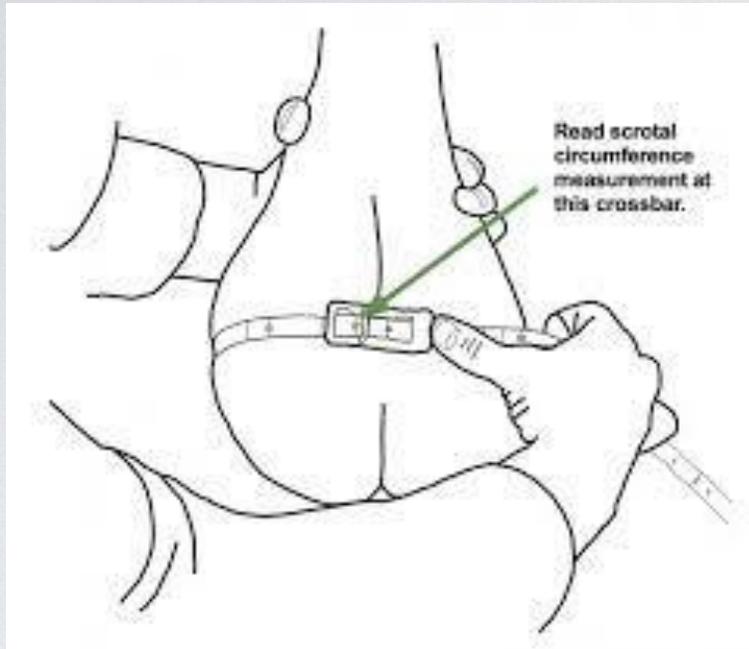
Boxer, English Bulldog, Chihuahua, Miniature Dachshund, Maltese, Pekingese, Pomeranian, Toy, Miniature and Standard Poodle, Miniature Schnauzer, Shetland Sheepdog, Siberian Husky, and Yorkshire Terrier.

Lack of 2 testicles in the scrotum by 8 weeks of age is considered to be suspicious for cryptorchidism. Classically, it has been accepted by the time an animal reaches 6 months of age, if it does not have 2 scrotal testicles, it is considered a cryptorchid



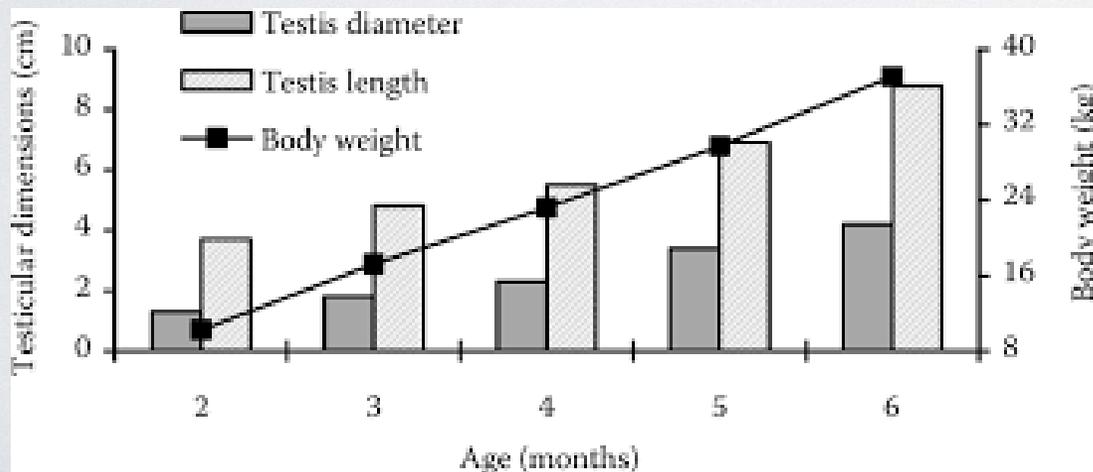
hCG or GnRH
Massage
Surgery

Measurement



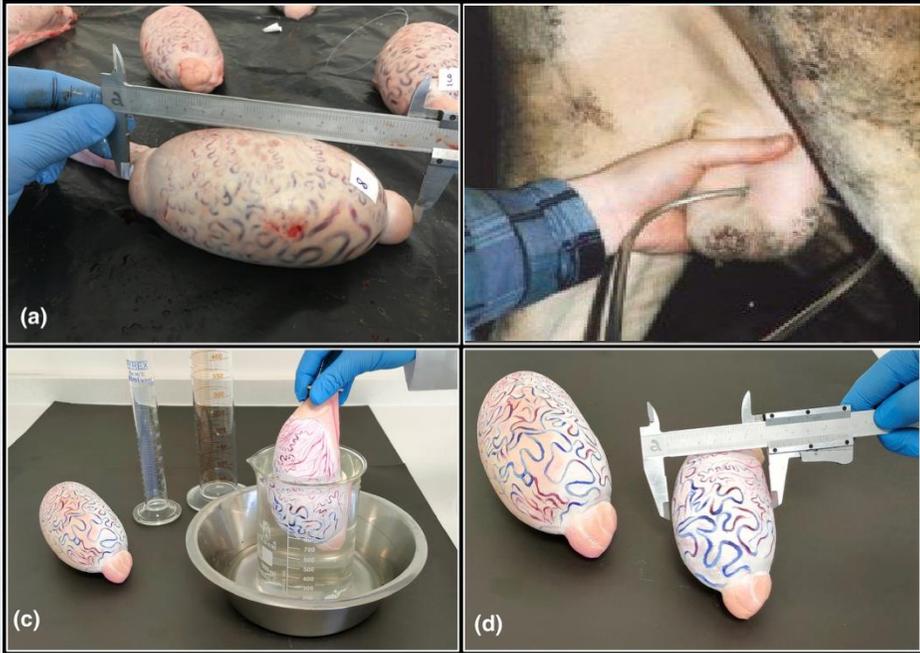
Months	Angus, Brpwn Swiss, Gelbvieh, Pinzgauer,	Charolais, Hereford, Holstein, Maine Anjou, Red	Blonde d'Aquitaine, Galloway,
12	32	30	29
13	33	31	30
14	34	32	31
15 -20	35	33	32

A minimum scrotal circumference of 32–34 cm is required, but aim for 35 cm and above.



Measurement

Testicular Volume



Big

for each testis

$$TV = (W \times H \times L) \times 0.5233$$

Small

$$TV = (W^2 \times H) \times 0.59$$

Daily Sperm Output (DSO)

$$DSO = (0.024 \times \text{testis volume}) - 0.76$$

Specie	Volume	DSO	Weekly	Per gram
Bull	2-8 ml (6.2) ml	1.8-4.8 × 10 ⁹	10-60 × 10 ⁹	18-20 × 10 ⁶
Stallion	15-120 (80) ml	4.5-12 × 10 ⁹	30-90 × 10 ⁹	18-20 × 10 ⁶
Small Rum	0.5-2 ml (1.2)	1.8-4.5 × 10 ⁹	10-60 × 10 ⁹	20 × 10 ⁶
Dog	0.1-4 (1.5)ml	0.6-1.2 × 10 ⁹	2-8 × 10 ⁹	400 × 10 ⁶

Spermatic Cord

Pampiniformis plexus

Testicular torsio

