

EYE EXAMINATION

Sight for mating

Contagious disease

Hereditary

- * There should be no persistent ocular discharge.
- * Examine the eyes for impaired vision. Blindness of one or both eyes could indicate a CNS condition.
- * Cataracts have been diagnosed on a number of occasions.
- * Entropion, a common hereditary fault in some breeds, is often treated surgically. Careful examination should be made for any residual signs of such surgery.
- * Keratoconjunctivitis, 'pink eye', is often associated with groups of rams running together and can be a very painful condition. If neglected this condition can cause blindness.



Keratoconjunctivitis sicca



EVA ?



Pink eye



Anterior uveitis (ovine iritis)



Entropion

HEAD & JAW EXAMINATION

No malformation

Maxillar/mandibular agnatia

Slyvian (Kraniosinostoz)



FAMACHA

FAMACHA© System

Clinical category	Color	PCV	Tx recommendation
1	Red	≥ 28	No
2	Red-pink	23-27	No
3	Pink	18-22	?
4	Pink-white	13-17	Yes
5	White	≤ 12	Yes



MANACE REFLEX



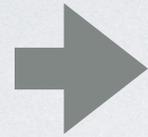
star-gazing ewe



B1 def

Polioencephalomalacia

EAR EXAMINATION



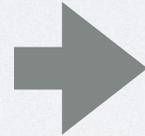
For mating

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4672198/>

Congenital deafness



Can be either cochleosaccular or neuroepithelial in origin
Suppression of melanocytes by the pigment gene



Hereditary

Altered reproductive behaviour



1. Altered behavior.
2. Becoming easily startled (scared)
3. Not responding to verbal cues
4. Difficulty with training and mating
5. Leaning to one side – if there is an inner ear balance problem.



Piebald

Merle

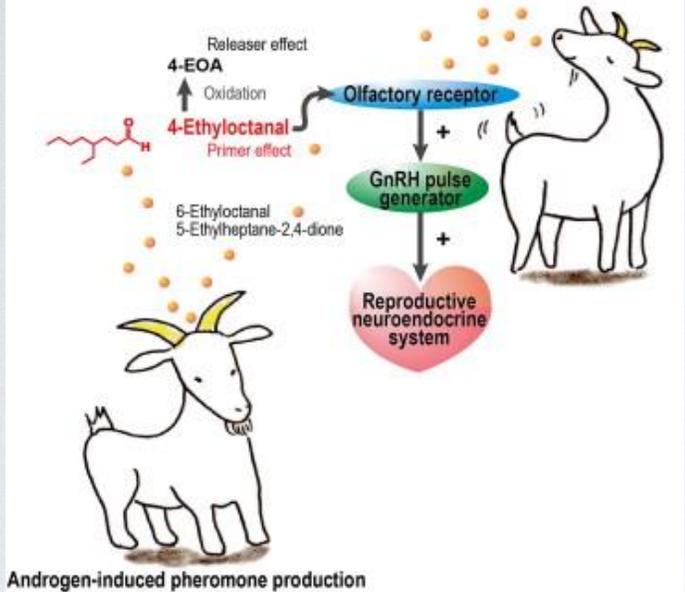
Blue eyes and white coat



<https://www.lsu.edu/deafness/breeds.htm>

NOSE AND JAW

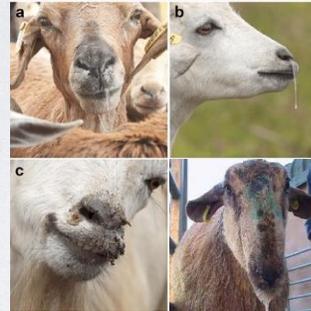
"Male effect" pheromone is released from the male head skin and stimulates female's reproductive system in goats



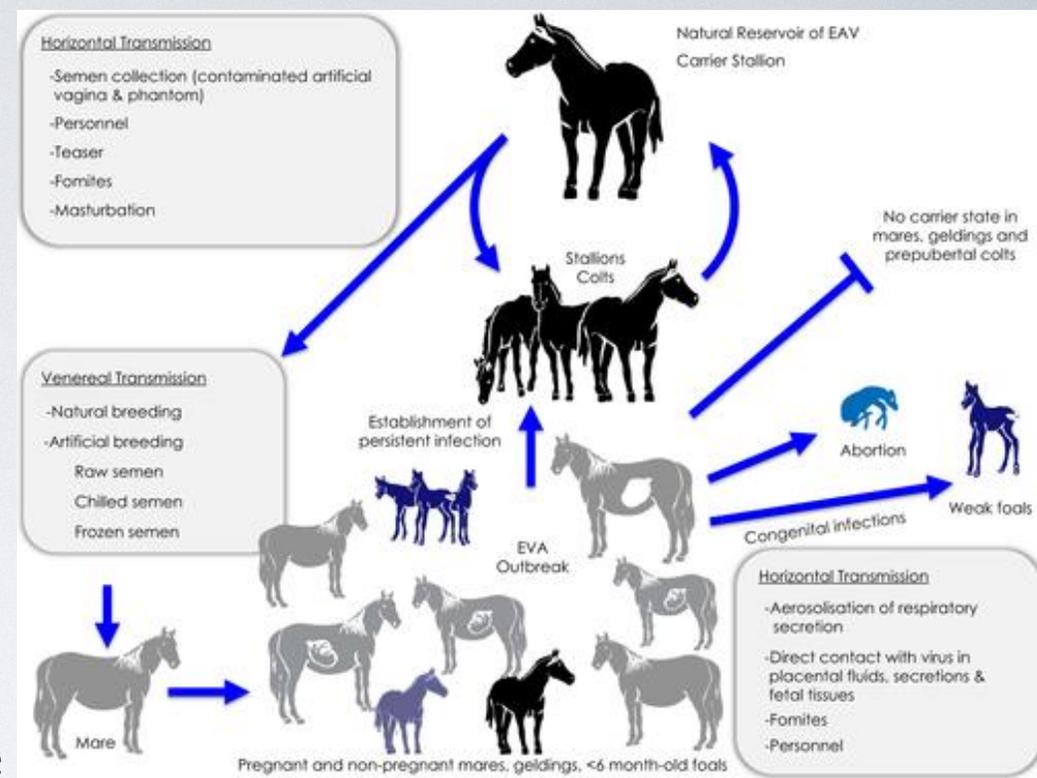
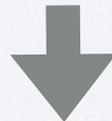
Male effect

Pheromones are olfactory cues that signal the social and sexual status of individuals of a species, and their detection is a key step in regulating behaviors such as mating and aggression

No nasal discharge



Normal respiratory rate



TEETH AND TONGUE



Normal bite, normal jaws (no actinobacillosis, hard swelling), good apposition with dental pad



Mastication problem

Malnutrition

Low or no reproductive capacity

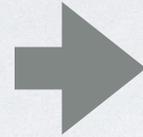


Vitamin deficiencies like Vitamin A, E, and Biotin and mineral deficiencies like Copper, Zinc, Sulfur, Selenium, and Iron are often to blame for poor hair coat

HAIR COAT

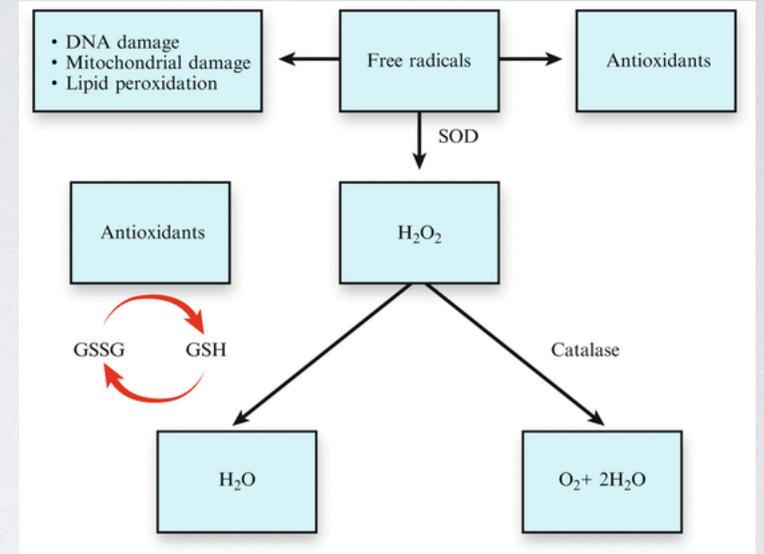
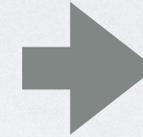


Low hair coat quality



Malnutrition

ROS



Side-effects



Scrapie, Scabies, mineral deficiency



Ecto parasites

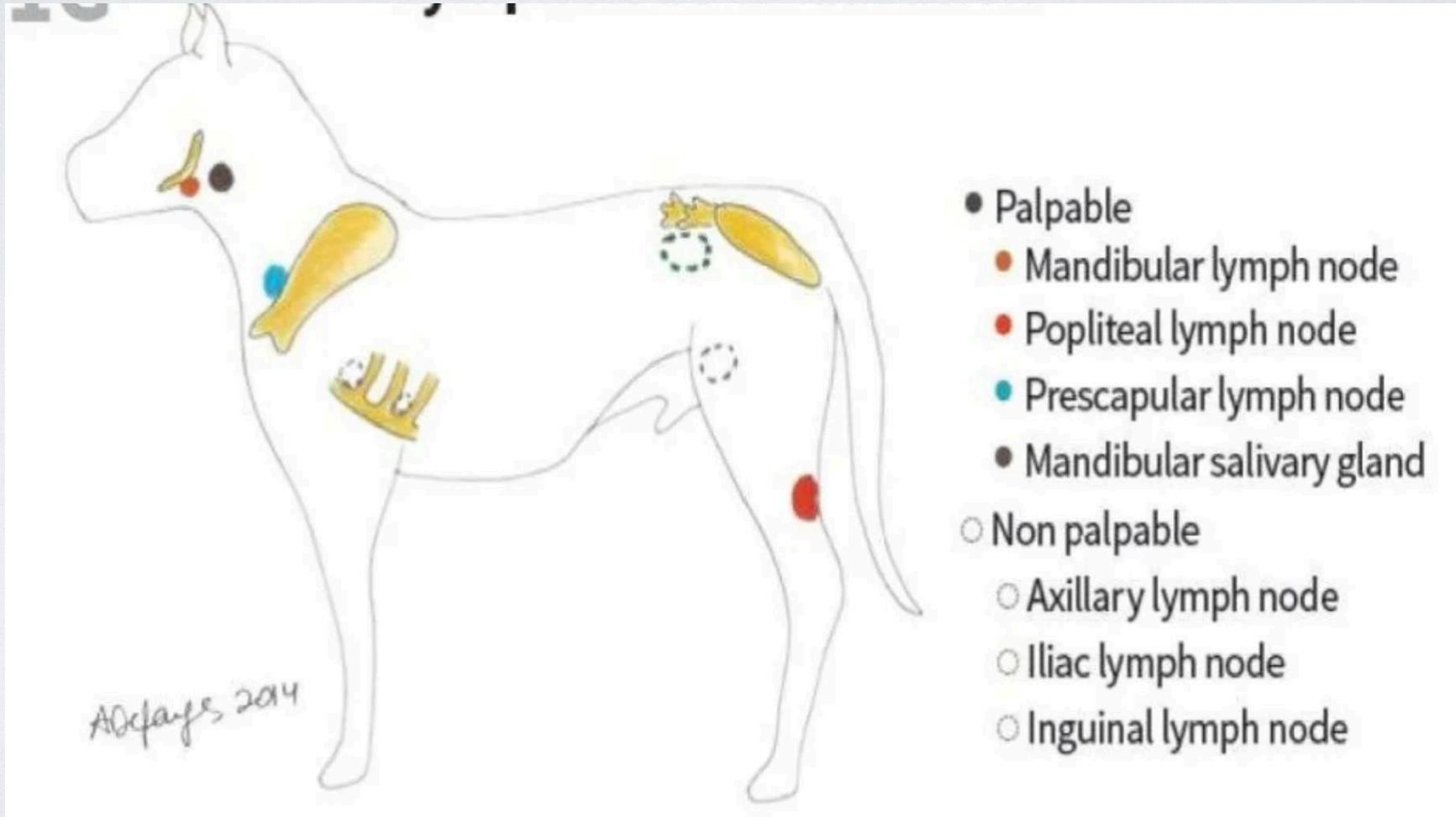


Bowel strikes



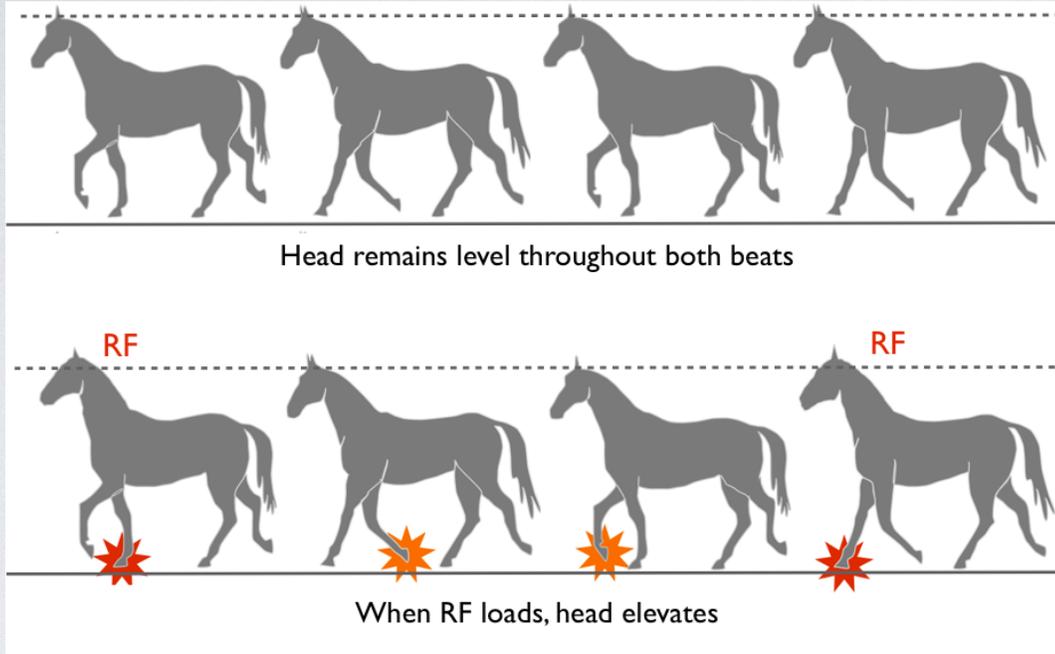
Trichopyhtosis & terbinafine, itraconazole

LYMPH NODULES



LOCOMOTOR SYSTEM

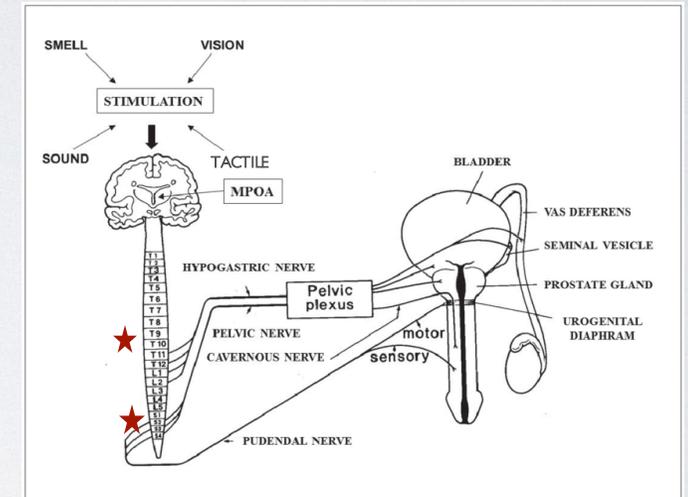
Testosterone = Muscle mass



Musculoskeletal system

Hypogastric Plexus

Pelvic, Splenic and Pudental



Male animals should have normal feet and legs for good standing positions during mating. Stud's with lameness, foot rot, foot abscess, inter-digital growths or with non-trimmed hooves should be promptly treated.

Backbone Chronic pain
T12, L and S



Impotentia



Deciding for future

EXTERNAL REPRODUCTIVE ORGANS

Preputium

Penis

Spermatic cord

Scrotum

Testis

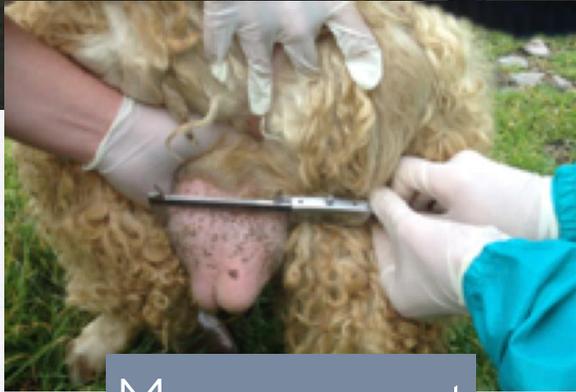
Epididymis



Inspection



Palpation



Measurement



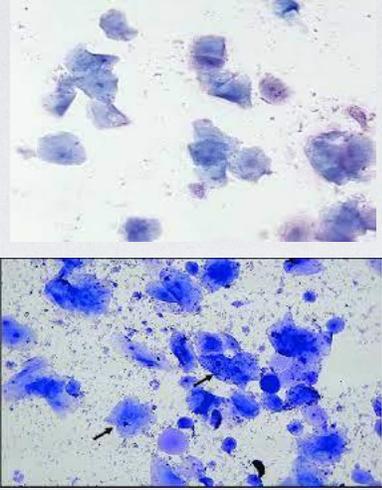
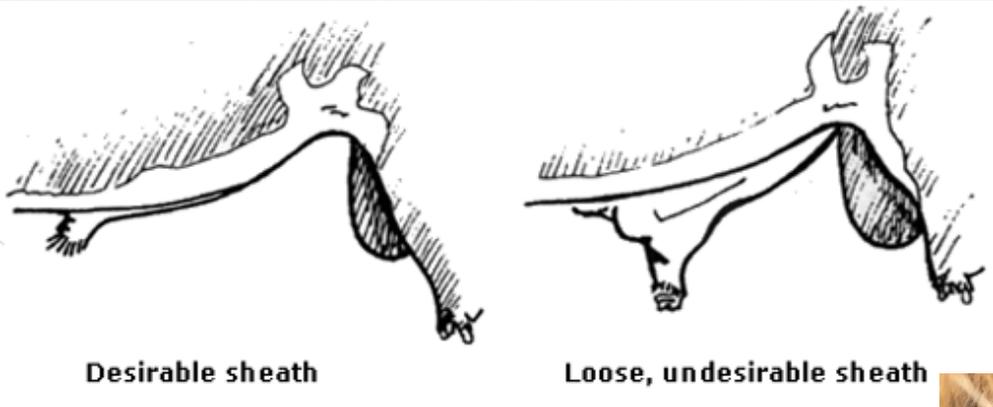
Sampling

Preputium

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

Naturally attached to penis

Protection, Sebaceous glands, Immune function



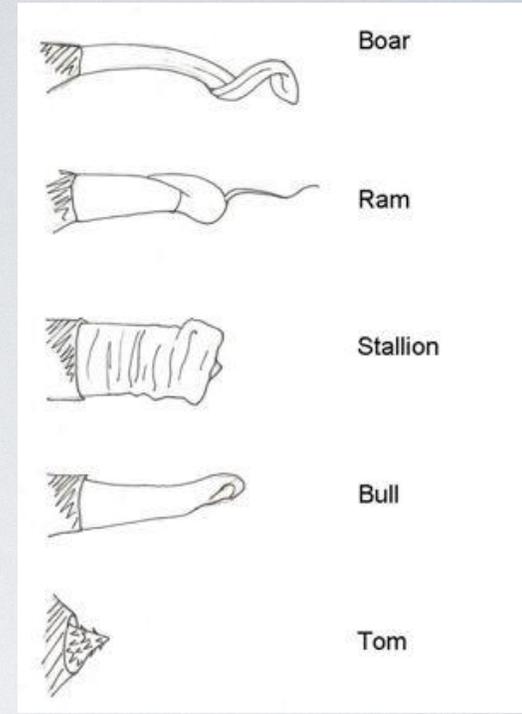
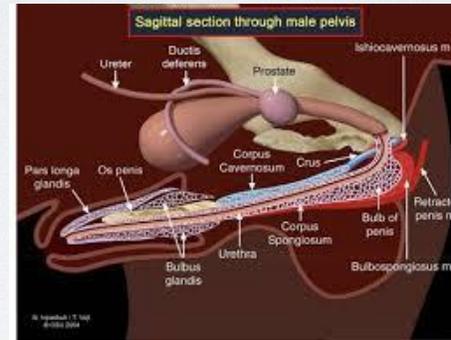
Posthitis + Balanitis = Balanoposthitis

Penis

2 type of penis

1. Cavernous
2. Fibroelastic shape

Duty: Mating and urination



Congenital

Frenulum



Hypospadias

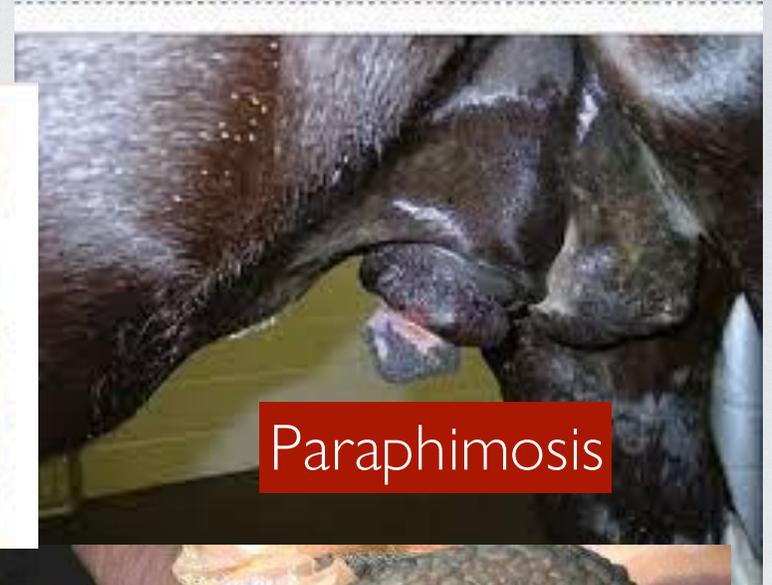
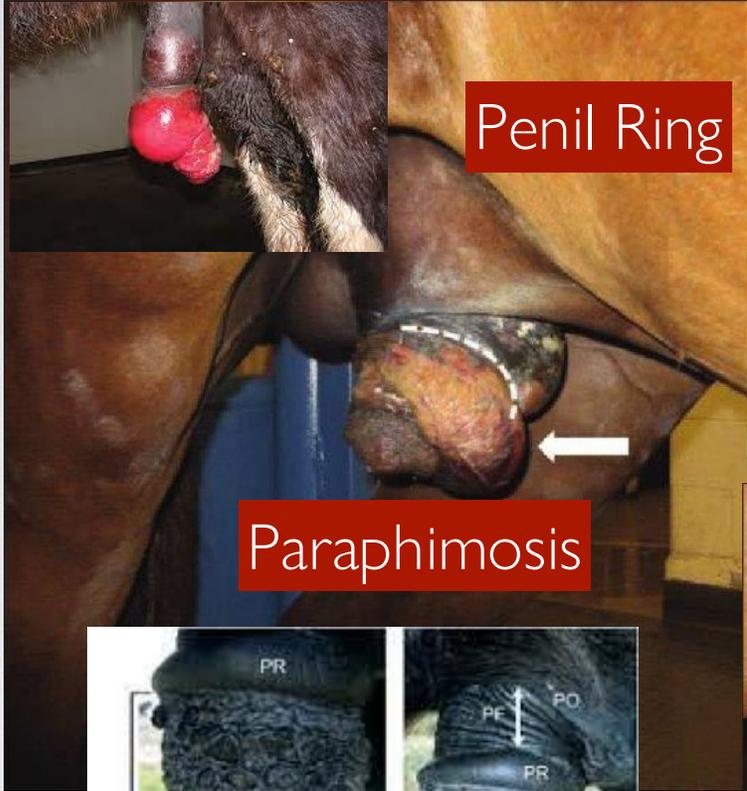


Penil Hypoplasia



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.



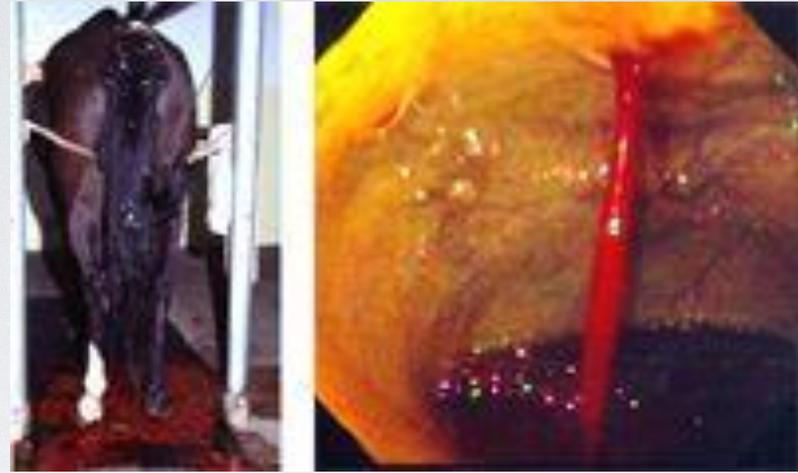
Fibro-Sarcom



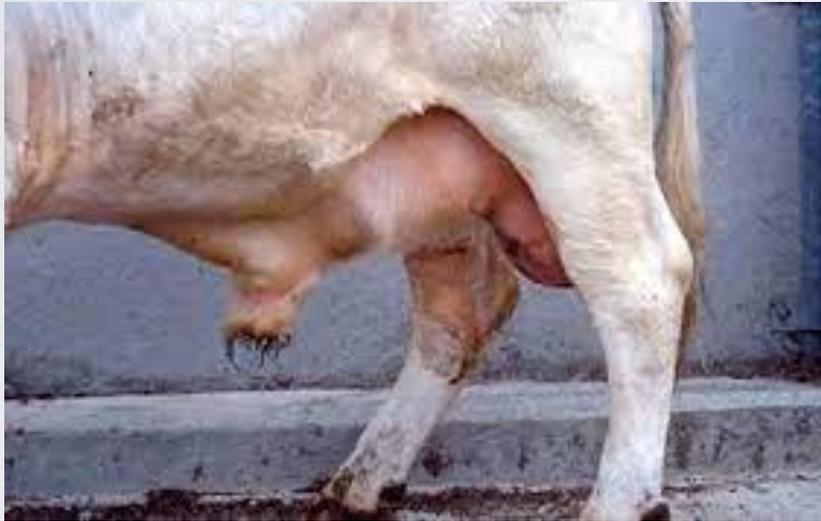
Trauma



EHV-3 (Equine coital exanthema)



Idiopathic renal haematuria

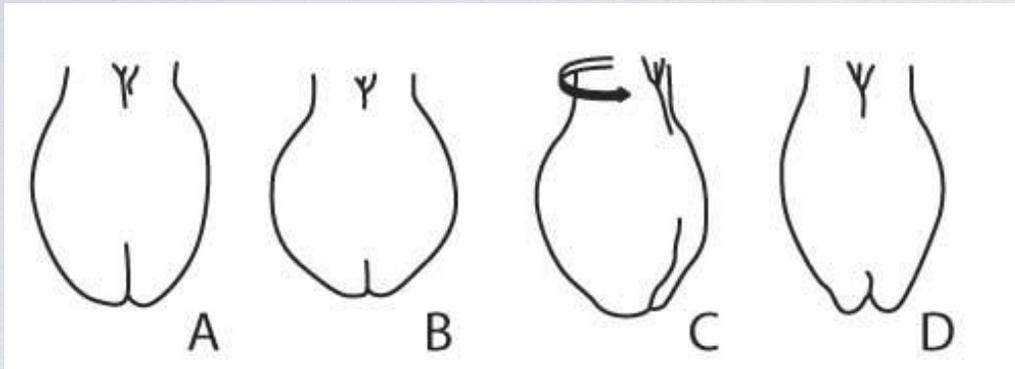


Urolithiasis

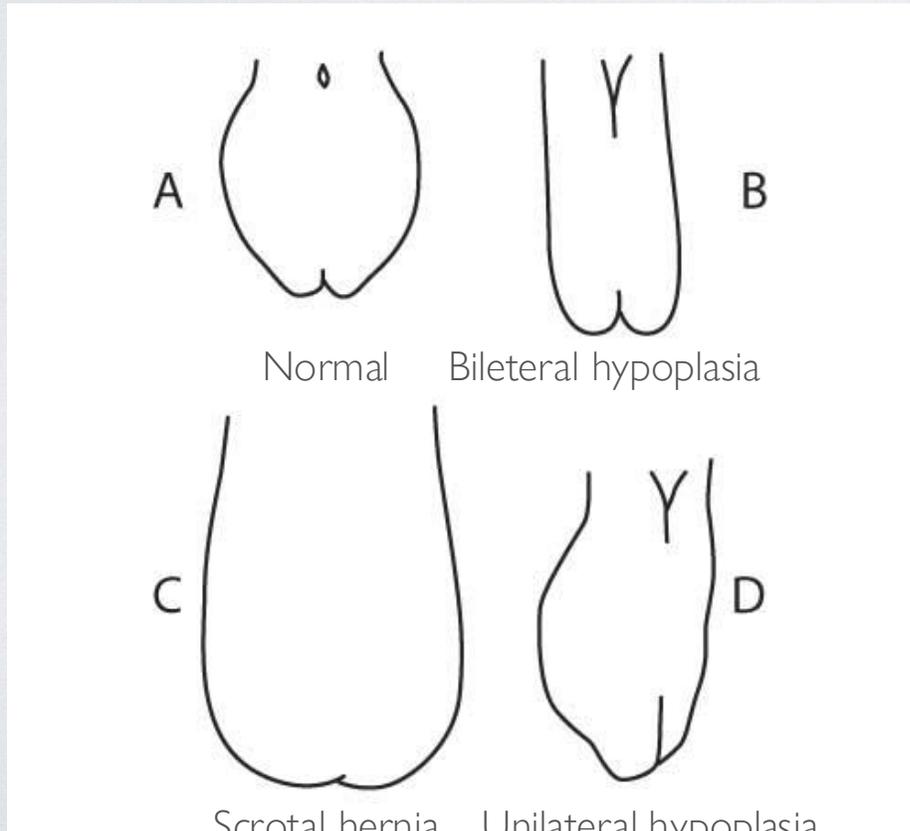


Pizzle rot

Scrotal Confirmation



Normal Normal ovoid Twisted Cleavage



Normal Bilateral hypoplasia Scrotal hernia Unilateral hypoplasia

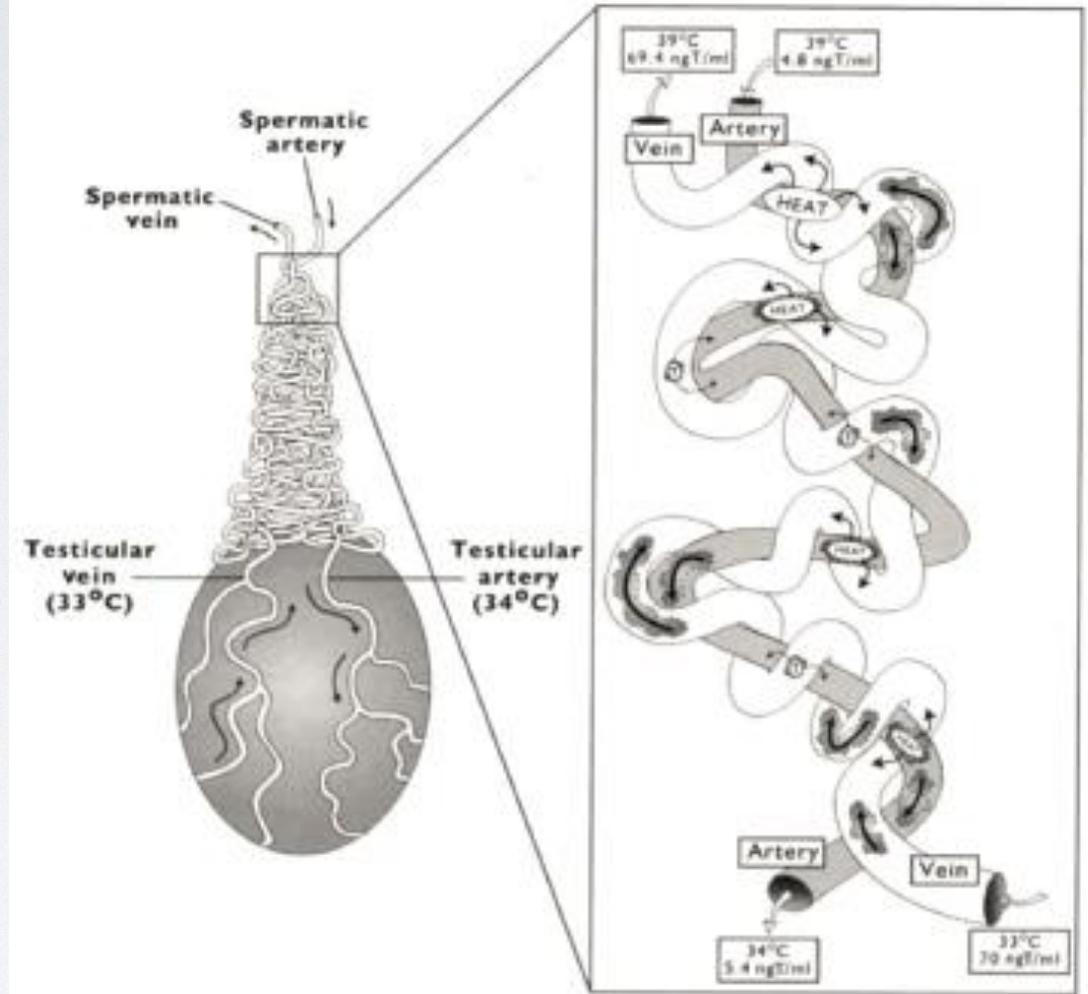
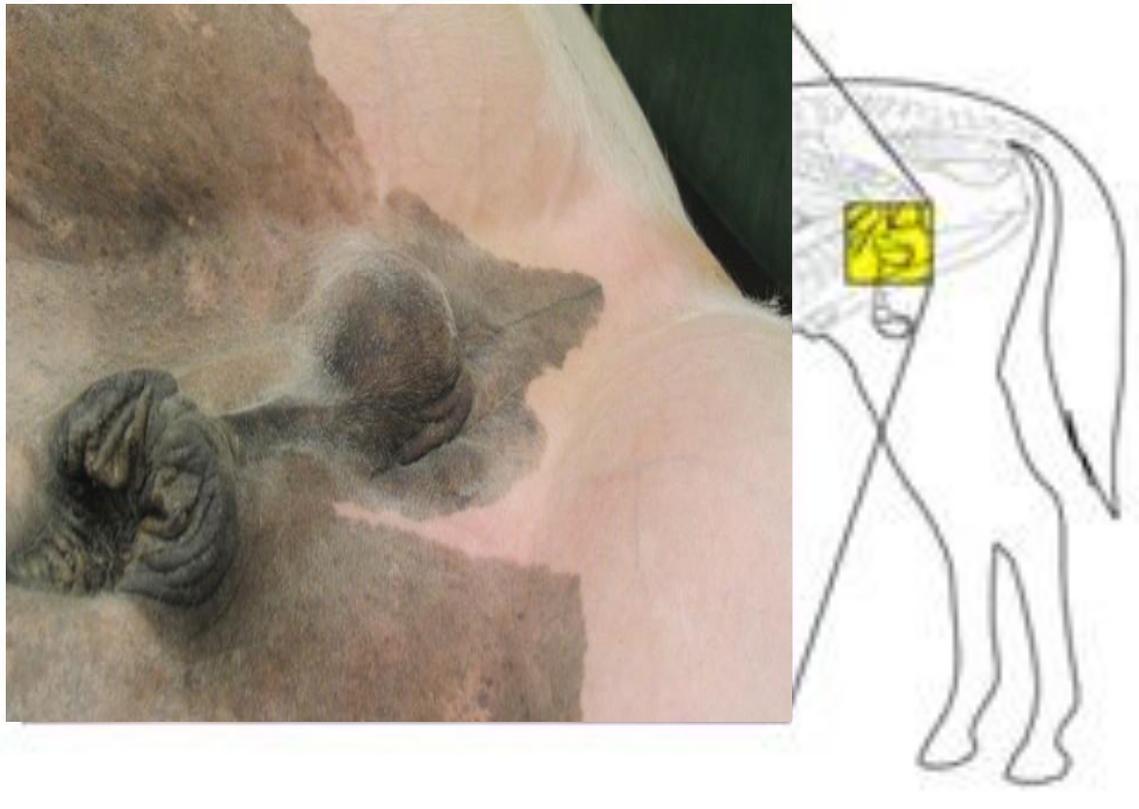


DIAGRAM SHOWING THE COOLING FUNCTION OF THE PAMPINIFORM PLEXUS (Texas A&M University)

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

Unilateral

Monolateral

Bilateral

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

Abdominal cavity

Inguinal canal

S.C. (outside the abdominal wall)

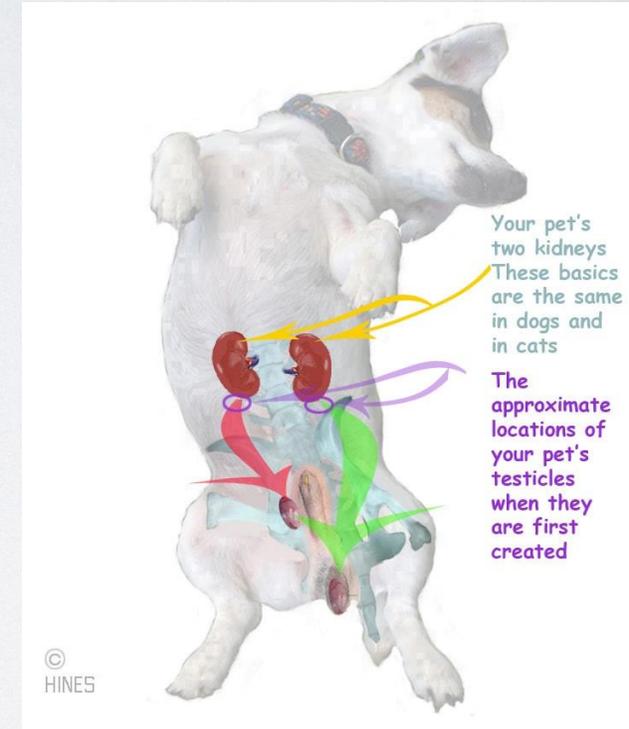
3 factors:

- 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

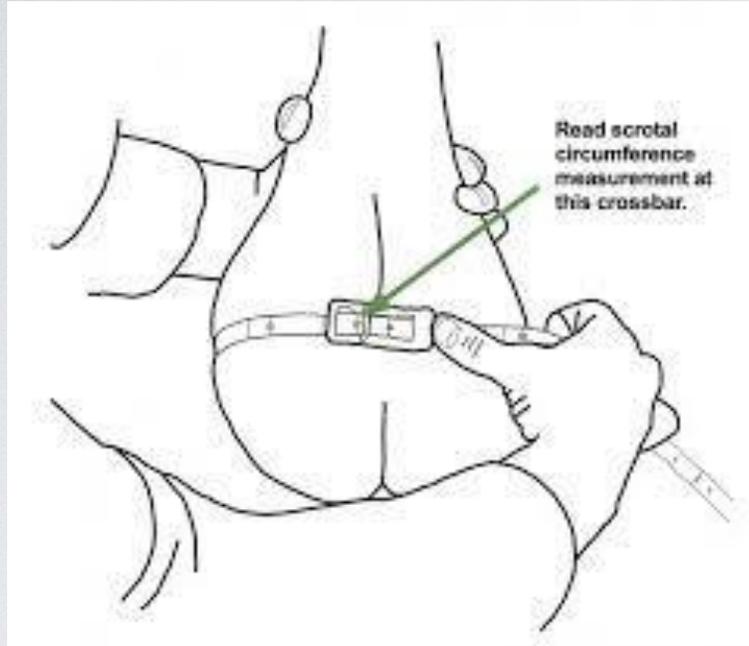


hCG or GnRH
Massage
Surgery

Species	Normal Descent (Age)	Cryptorchidism (Diagnosis Time)	References
Dog	By ~6–8 weeks (~2 months)	Failure of descent by ~4–6 months (Unilateral or Bilateral)	Johnston et al., 2001; Foster and Ladds, 2007
Cat	At birth or within 2 months	Failure of descent by ~4 months (Unilateral or Bilateral)	Romagnoli, 1991; Johnston et al., 2001
Horse (Stallion/Colt)	At birth or within 10–14 days postpartum	Failure of descent by ~18 months; definitive by 2 years	McDonnell, 2000; Hinrichs, 2010
Cattle (Bull)	At birth (within first week)	Failure of descent by birth or shortly thereafter	Youngquist and Threlfall, 2007; Barth and Oko, 1989
Pig (Boar)	At birth	Failure of descent at birth	Rothschild and Ruvinsky, 2011
Goat (Buck)	At birth	Failure of descent at birth	Youngquist and Threlfall, 2007; Smith and Sherman, 2009
Sheep (Ram)	At birth	Failure of descent at birth	Youngquist and Threlfall, 2007; Smith and Sherman, 2009

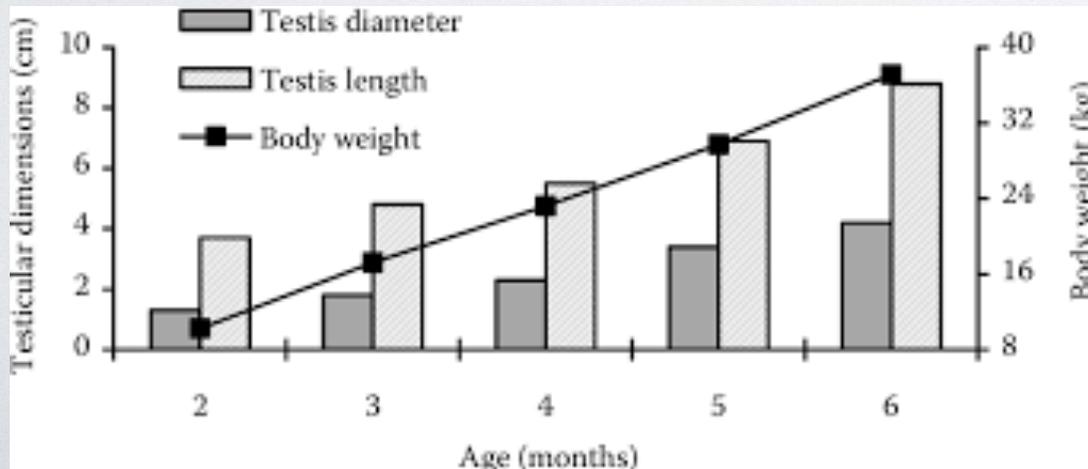
Measurement

To calculate TV



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

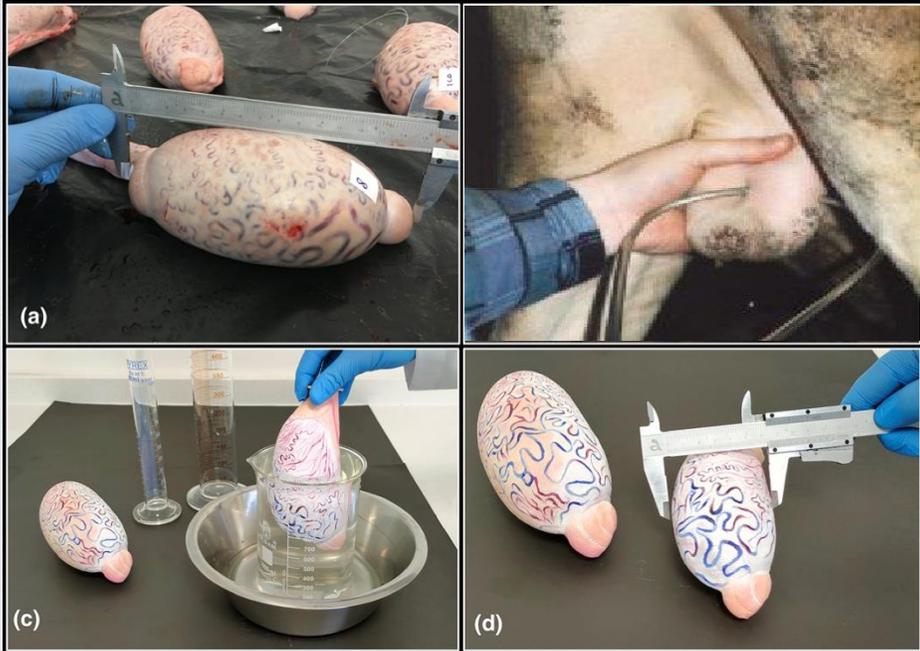
A minimum scrotal circumference of 32–34 cm is required, but aim for 35 cm and above.



Highest heredibility for new bornweight

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)

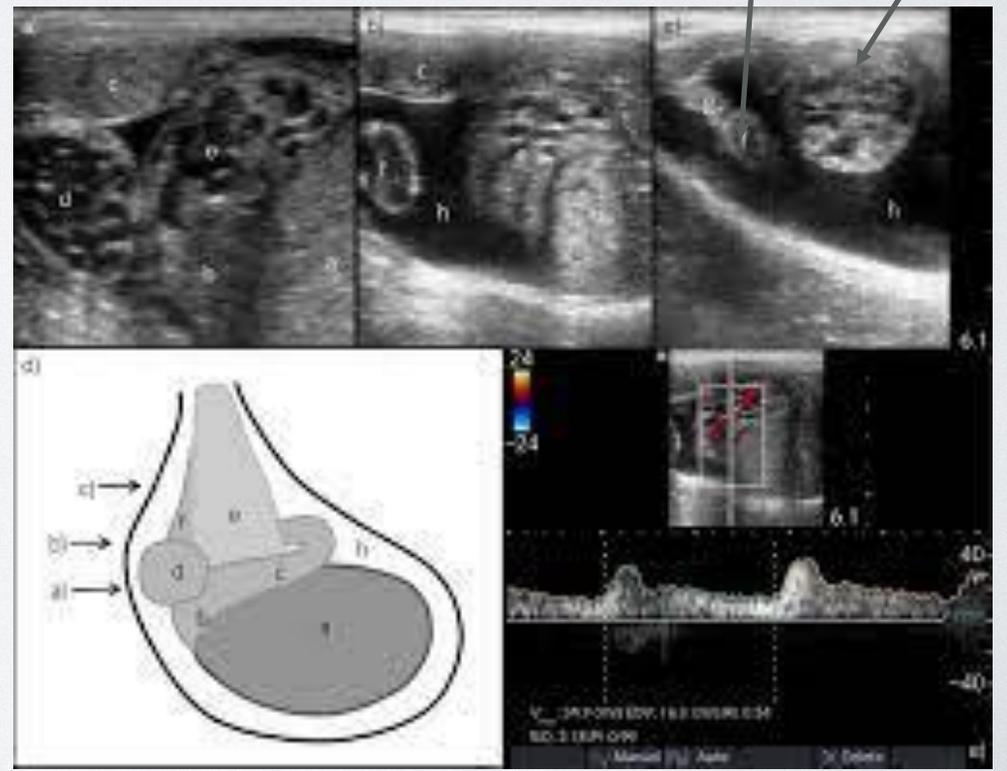
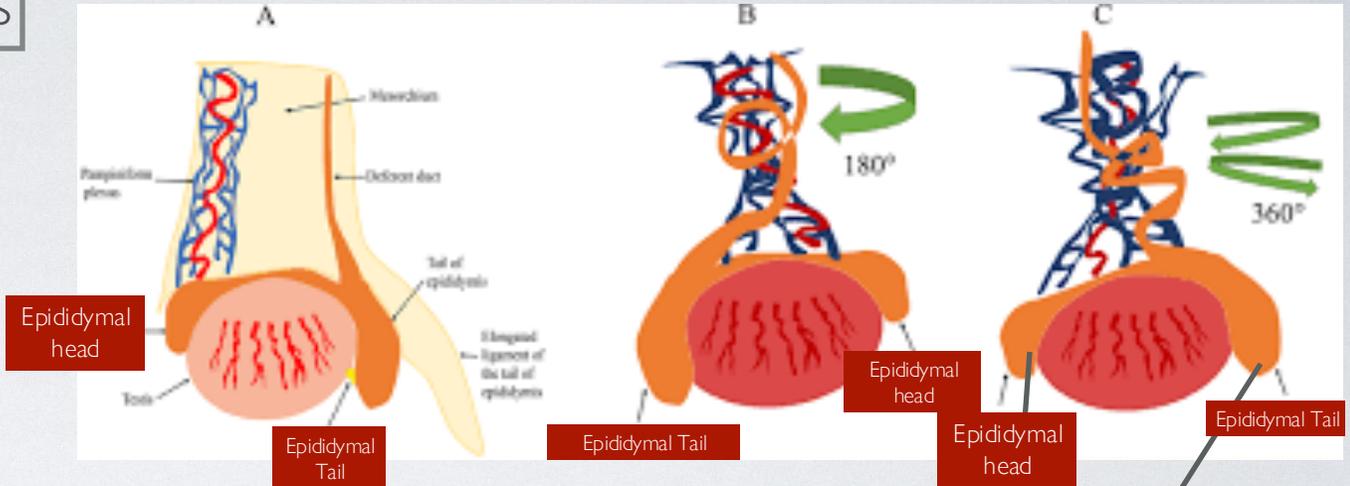
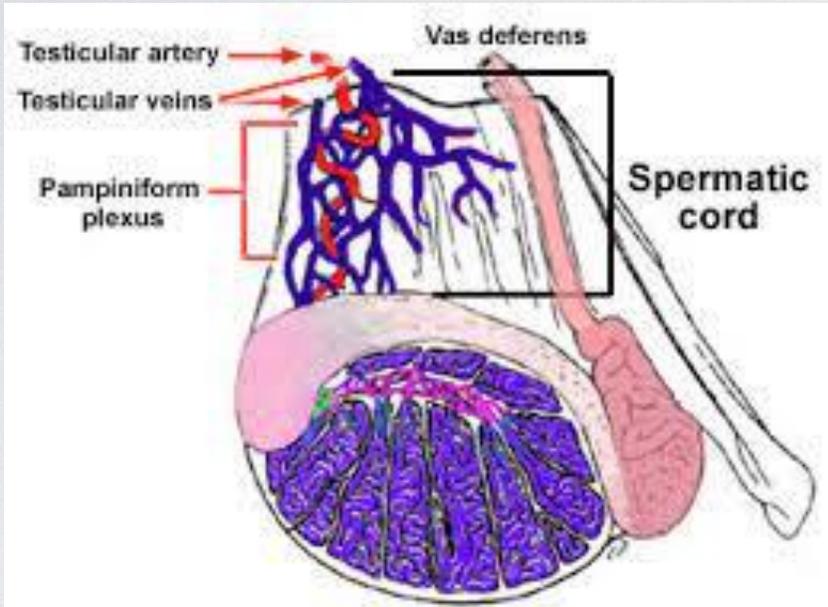
$$DSO = (0.024 \times \text{testis volume}) - 0.76$$

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

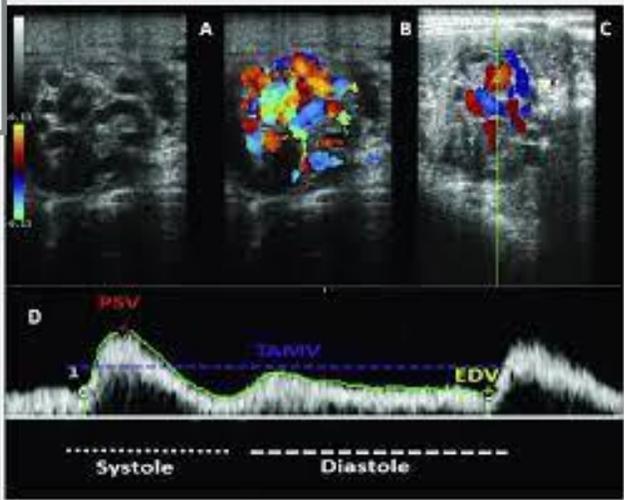


Abdominal pain (Colic)

Anormal Gait

Lameness

Vomitting



Cryptorsidism?

Neoplasia?

Ischemia

Hypoxia

(uni or Bi) Orchietomy

Orchiectomy