

Sepsis in Cattle

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Pink eye

Infectious kerato-conjunctivitis

- A bacterial infection that causes inflammation
- Maybe mild or in severe cases, can cause blindness.
- Occurs when the cornea is damaged by dust, abrasions, trauma, **flies, and** the bacteria, Moraxella is present. Other organisms such as IBR, mycoplasma, chlamydia and Brachyella ovis will increase the incidence and severity of disease.





Treatment

- Check under eyelids for foreign bodies (grass & weed seeds)
- Stage 1, 2 & 3- antibiotics sub-conjunctival and/or systemic
Most antibiotics can be used.
Topical – Vetericyn (hypochlorus solution), honey, aloe vera juice. Very short acting.
Anti-inflammatory – flunixinamine, meloxicam, ketoprofen
- Protect eye – shade, patches, tarsorrhaphy

Check under eyelids for foreign body

Mechanical trauma

► How to tell **pinkeye** vs **foxtail** EARLY on?

Look at pattern of edema-with
foxtail, it blends into 'limbus'



With EARLY pinkeye, edema
more towards center



Lumpy Jaw (Actinomyces bovis)







Wooden tongue (Actinobacillus)



Foot rot (Infectious pododermatitis)







Sub solar abscess







Preputial injuries









Umbilical infections





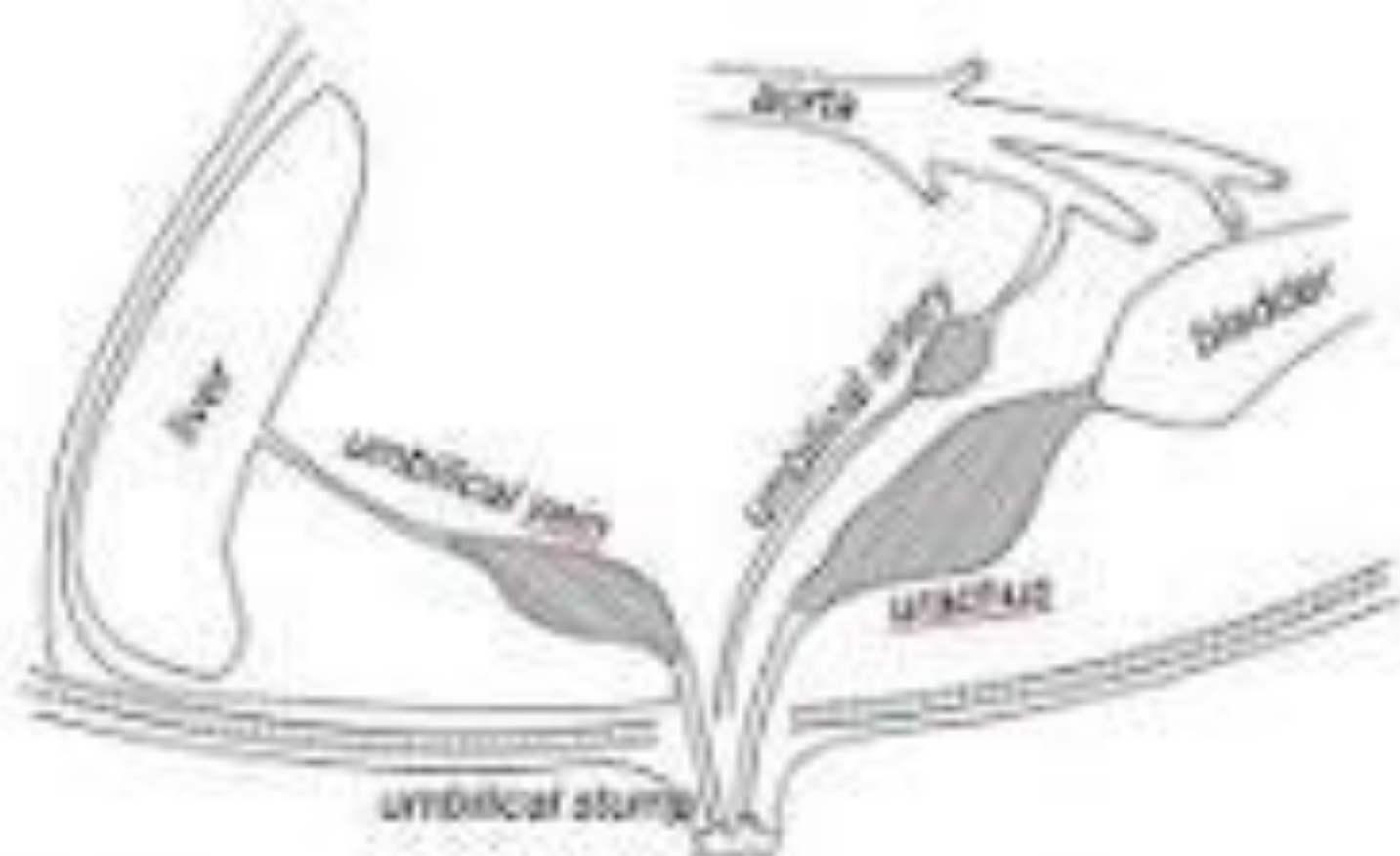
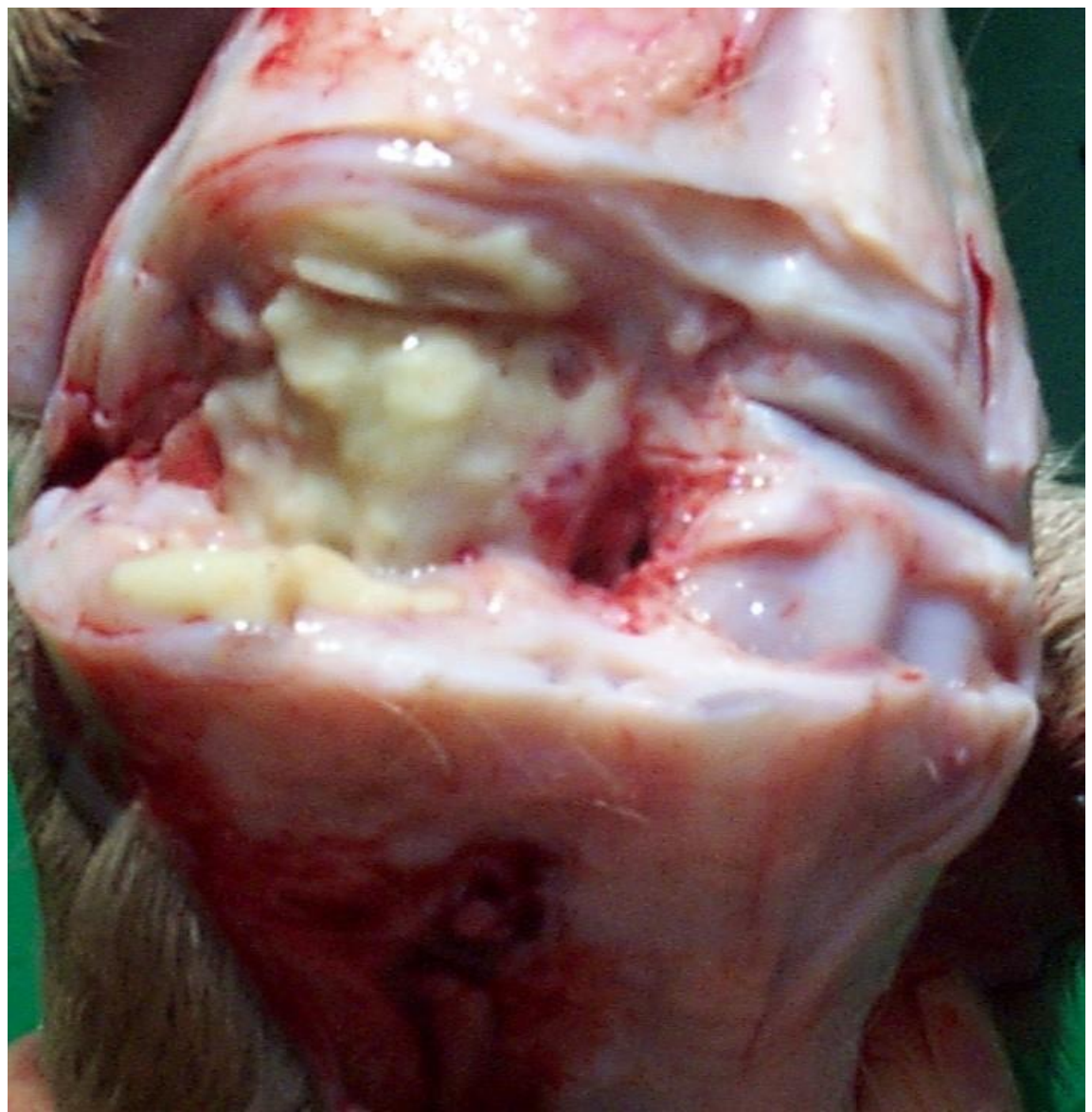


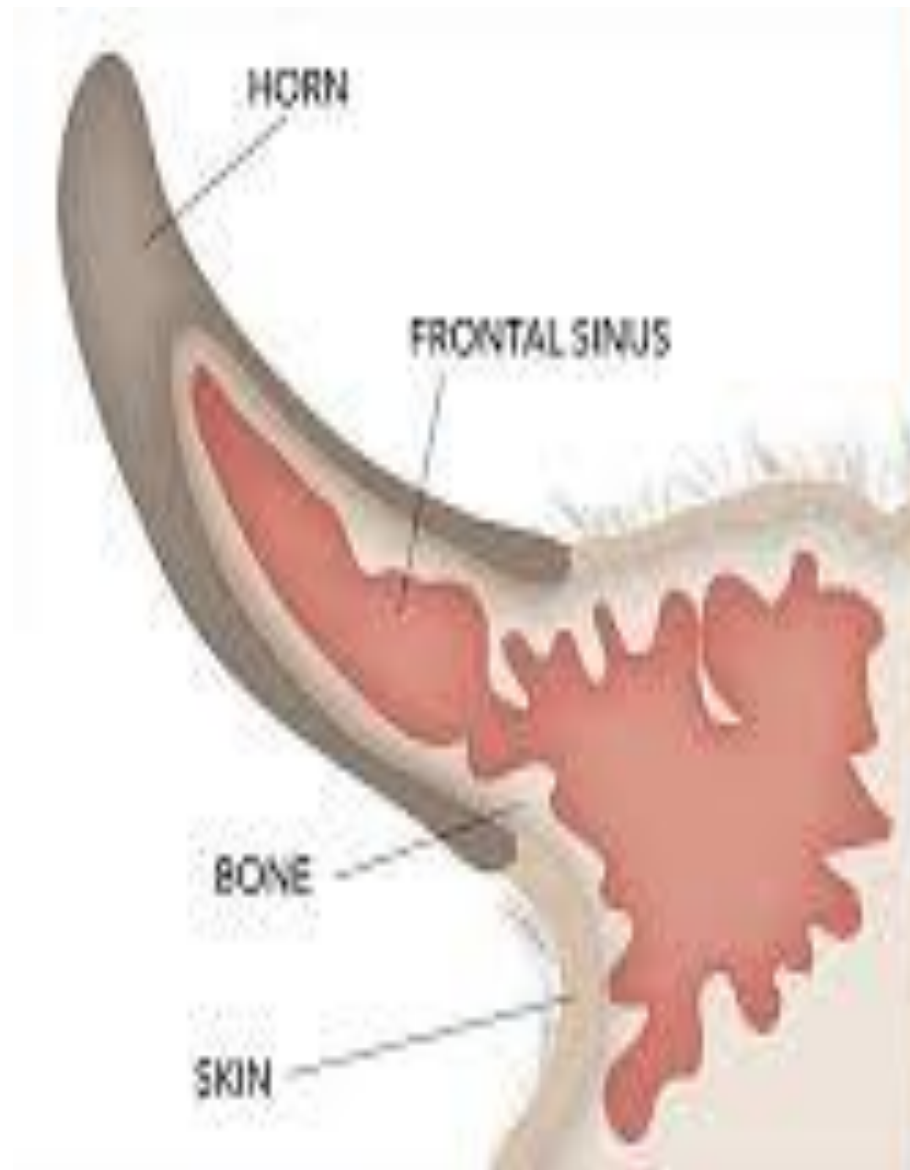
Figure 1. Illustration of the possible sites of umbilical remnant infection within the abdomen. Infection may involve single or multiple structures. [Image adapted from *Bovine Surgery and Lameness*, 2nd ed, by Weaver AD, St. Jean GL, and Steiner A, 2005, p 123, Oxford, UK: Blackwell Publishing.]

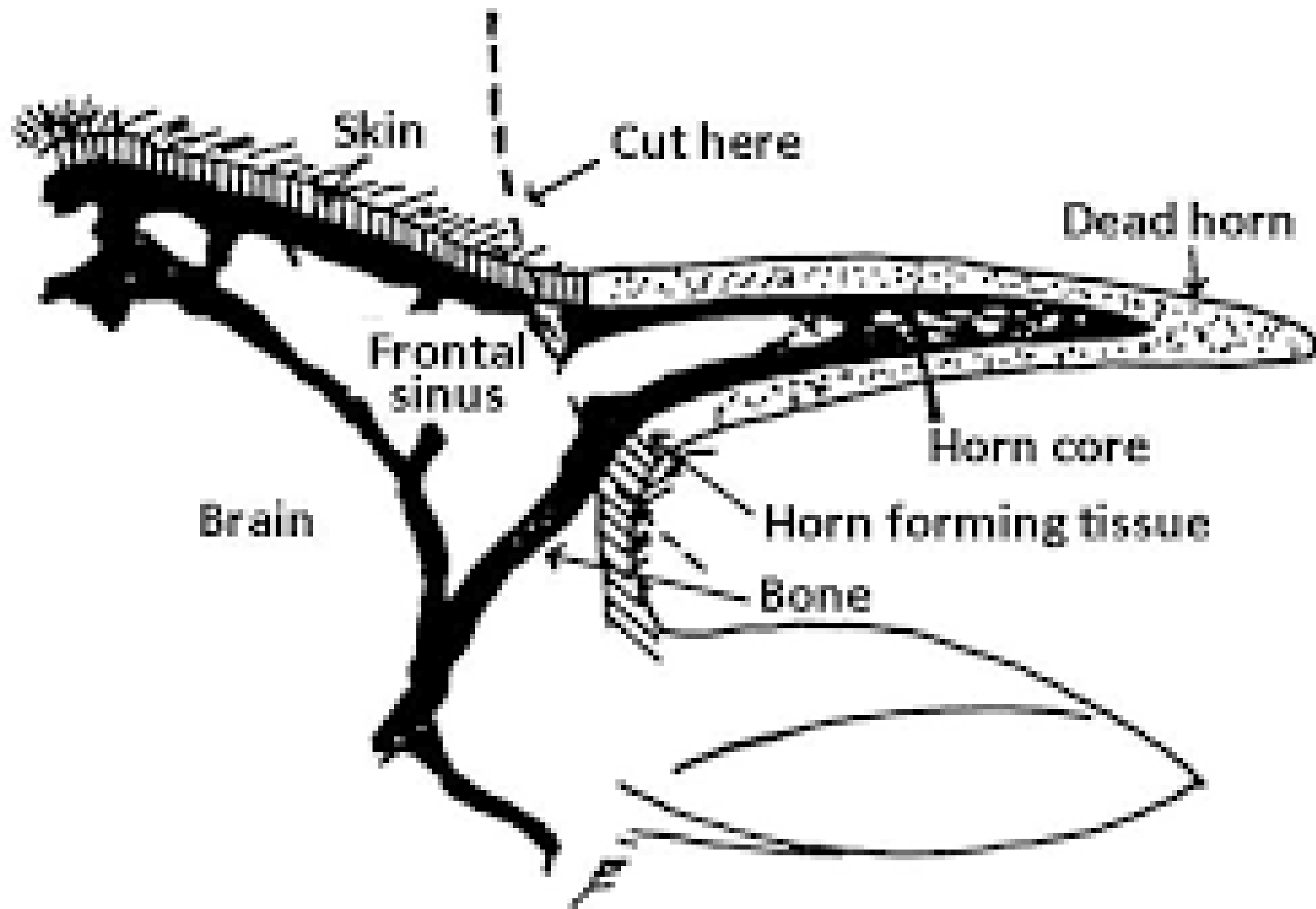




Horn Wounds

- Fractures – 42%
- Avulsion – 37%
- Septic horn – 8%
- Over Grown horns – 5%
- Fissures – 5%
- Maggot wound – 2%
- Empyema of cornual sinus – 1%
- Cancer of horn – 0.3%











Avulsion of horn



Avulsion of horn

Definition:

Separation of horny covering of the horn core due to injury is known as avulsion of horn.

Treatment:

*** Very painful!** Use local nerve block!

- If bleeding, then a tourniquet is applied for about half an hour.
- The wound is cleaned with antiseptic lotion.
- Place a moist antiseptic pad soaked in the lotion and bandage is applied.
- On subsequent day, the bandage is removed and oily dressing or ointment is applied.
- The horny tissue develops completely within few months.



Overgrown horns



Horn cancer



- It is malignant in nature and originate from the squamous cell lining of the core at the base of the horn.
- It is generally a disease of adult cattle between 5 to 10 years of age.
- The tumor is observed in more commonly in long horned , white coat breeds of cattle.
- Kankrej Bullocks are more susceptible.
- **Etiology:-** Trauma, chronic irritation, paints, solar radiation, virus.

Horn cancer



Signs



- The affected animal show sign of painful manifested by keeping the head a little lower toward the affected side
- Constant shaking of the head.
- Rubbing of horn on some hard object or striking it with limbs.
- Slight slimy or bloody discharge from nostril or from the base of the affected horn.
- Tilting of the horn on the one side.
- Separation of horn occurs at the base of the horn and cauliflower like growth is exposed Which bleeds easily and gives offensive smell due to secondary infection.

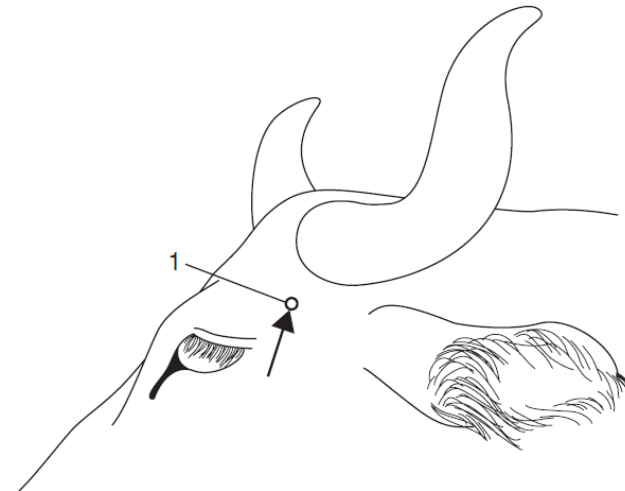
Dehorning

Definition:- The removal of the horn of an animal by methods which destroy or remove the keratin-producing cells and structures at the base of the horn.

Use a wire saw (OB wire) or regular carpenter saw

Do a Cornual nerve block – approx. 10cc lidocaine

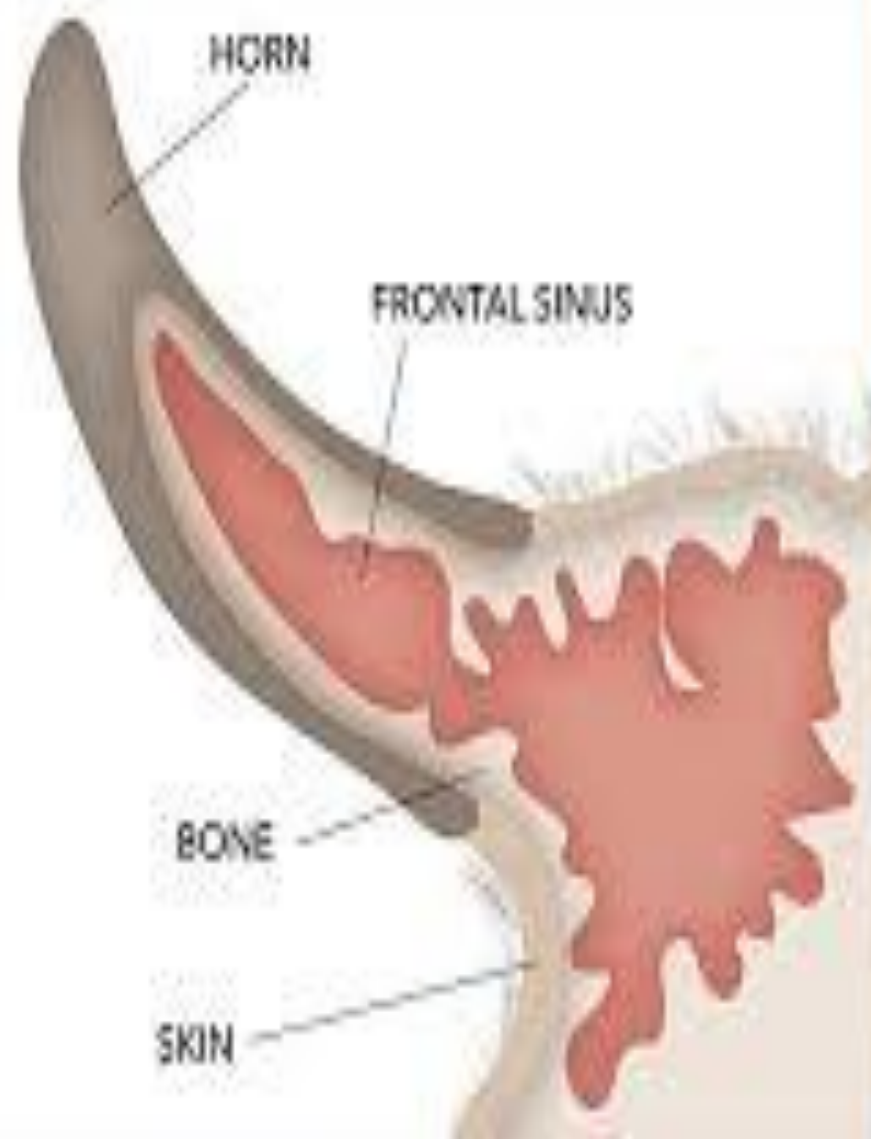
CLOT-Cornual Nerve-Lacrimal-
Ophthalmic-Trigeminal Nerve



Technique



- An elliptical incision is given around the base of the horn.
- The skin on both sides of the incision is reflected to form a flap.
- The exposed horn is then cut close to its base either using a saw or an obstetrical wire.
- The arteries can be grasped with a hemostat and pulled or twisted to arrest haemorrhage. A hot piece of iron can also be used to cauterize the bleeding vessels. Cover sinus opening. Cotton, paper towel, etc.



Sinusitis

- **Sinusitis** is a common sequel to dehorning in all species of animals. During amputation of horn, bone sawdust and rain can enter into the sinus through the opening. Sometimes, the animal may rub its head on the ground due to severe irritation leading to entry of more debris into the sinus tract.
- **Clinical sign** includes discharge run from the sinus opening when the animal lowers the head. Occasionally, the sinus will become heavily infected leading to profuse and purulent discharge.

Treatment

- Comprises draining by opening the dehorning site, flushing it copiously with a disinfectant, and tipping the head to drain it on a daily basis until it dries up and drainage ceases.
- Administer systemic antibiotics.
- Chronic sinusitis is best treated by trephination and lavage, administration of topical and systemic antibiotics and analgesics.
- If drainage persists, osteomyelitis may develop which can be best treated by surgical curettage.

Antibiotic dosages

- Oxytetracycline – 20 – 30 mg/kg SubQ, IM, IV (slowly)
- Ceftiofur – 1.1 – 2.2 mg/kg – SubQ or IM
- Tulathromycin – 2.5 mg/kg SubQ
- Amoxicillin – 7 – 15 mg/kg SubQ or IM
- Enrofloxacin – 5 mg/kg SubQ, IM, IV (slowly)
- Sodium Iodide – 66 mg/kg IV (slowly). Repeat every 7 days for 3 -4 treatments.

Anti-inflammatories

- Flunixin melgumine – 2.2 mg/kg SubQ, IM, IV, PO
- Meloxicam – 0.5 mg/kg SubQ, IM, IV
1 mg/kg PO
- Ketoprofen – 3 mg/kg IM, IV
- Dexamethasone – 0.5 – 1 mg/kg IM, IV
5 – 10 mg **per adult** PO