**CORNUAL NERVE BLOCK IN CATTLE**

* The corneal nerve is the ophthalmic division (sensory division) of the Trigeminal nerve (CRN V). This nerve supplies the horn corium and the skin around the base of the horn
* It can be palpated halfway from the lateral canthus of the eye super to a point 3cm from the lateral base of the horn, between the frontalis and temporal muscles. In large bulls the nerve lies deeper

*Drug:* Lidocaine 2%. WDT; Meat- 5 days, Milk – 96 hrs.

*Weight of Animal:* 500kg

*Dosage:* 0.2mg/kg

*Volume Administered* = DxW/C

= 0.2x500/20

= 5 mL given

*Indications:* dehorning and treating horn injury.

*Procedure:*

1. Clean and disinfect the area in front of the base of the ear and at the end of the zygomatic arch with an alcohol swab
2. Insert the needle (21 gauge, 1.5”) at the cornual nerve midway between the eye and the base of the horn just below the temporal line. The nerve is relatively superficial, about 0.7-1 cm deep.
3. Draw back on the plunger to check that the needle is not placed intravascularly.
4. Inject 5mls of 2% lidocaine at the injection site and subsequently remove the needle
5. Hold off the site of injection and massage for even dispersion of the drug

Onset occurs 10-15 minutes and duration is approximately one hour.

*Complications/limitations/risks:* Failure may occur if the anaesthetic solution is injected too deeply, into the temporal muscle aponeurosis. Check that the whole area at the base of the horn has been anaesthetised before commencing the operation. In individuals with well-developed horns a second injection may be required, posterior to the horn or as an elliptical ring block around the horn base. Injection under the skin at the horn base may be difficult as the skin is tightly applied to the skull in this area.

*Video link of procedure:*

<https://www.youtube.com/watch?v=gc1bTa9coUM>