**CORNUAL NERVE BLOCK**

**Cattle:**

**Restraint:**

* Good handling facilities are required. An experienced holder for disbudding calves with the animal ideally in a confined space enables the block and procedure to be performed swiftly and effectively.
* Larger calves and cattle should be restrained in a crush with a halter on and the head tied up for the local block to be performed.

**Procedure:**

1. Injection site is beneath the rostral third of the temporal ridge .
2. Needle (18 to 20G gauge, 1.5-2.5cm) is inserted to approximately 1.0cm in depth, just below the temporal ridge, behind the lateral canthus of eye.
3. 5 ml of local anesthetic solution should be injected.
4. If the needle is inserted too deeply the local anesthetic will be deposited into the temporal muscle and the block will not be effective.
5. For dehorning in large calves and adult cattle, a second deposition of local anesthetic should be performed. A further 5ml of local anesthetic should be injected 1cm behind the first to ensure good/more complete block of the cornual nerve. Adult cattle with large horns may require a third deposition of local anesthetic to desensitize the cutaneous branches of the first two cervical nerves…so for these animals a cornual block is performed with some local infiltration of local anesthetic around the horn base.
   1. Local anesthetic can be deposited in the groove on the upper bony orbital rim (dorsolaterally to the medial canthus), to block the cornual branch of the infratrochlear nerve; and midway along the upper bony orbital rim to block the frontal nerve. (Done in goats)
6. Loss of sensation develops in 5–15 minutes and lasts 30 mins-2 hours depending what local anesthetic agent is used. Loss of sensation can be tested by pricking the skin all around the base of the horn.
7. 5 minutes to perform and then a further 5-10 minutes to allow local anesthetic.

**Goats:**

**Nerve block**

Because of anatomical differences, the cornual nerve block in goats require at least two injection sites per horn versus the aforementioned in cattle.

In goats the cornual nerve is a branch of the zygomaticotemporal nerve and lies halfway between the lateral canthus of the eye and the lateral base of the horn. The horn base in goats is also heavily innervated by the cornual branches of the infratrochlear nerve which exhibits the orbit at or in close proximity to the medial canthus. Because of the widespread branching the nerve is best blocked using a line block midway between the medial canthus of the eye and the medial horn base.

Alterantively a ring block around the base of the horn may also be used for anaesthesia for dehorning

