**Auriculopalpebral Nerve Block**

**Pre-Procedure**

**Signalment**

Cow #126: a 2-2½ y.o. intact cow with a body condition score of 3.0/5 (Penn State scale) and an approximate weight of 450kg

Bright, alert and responsive (BAR)

Physical examination was generally satisfactory, with the exception of a healing wound on her left flank

TPR values were within normal range

Temperature: 39oC

Pulse rate: 58bpm

Respiratory rate: 40 breaths/min

**Use of drugs**

In order to conduct this block of the auriculopalpebral nerve, 10ml of 2% lidocaine was administered to the cow. Proper knowledge of the anatomical landmarks is necessary before administering the local anaesthetic. The auriculopalpebral nerve is found lateral to the zygomatic bone as shown:



In the event of an emergency, drugs may need to be utilized to reverse the effects of any sedative/anaesthetic used. In this procedure, the following drugs were intended for use as emergency drugs:

* Atropine at 33.3mL

 $Volume=\frac{450 kg ×0.04 mg/kg}{0.54 mg/ml}$

 $Volume=33.33 ml$

* Epinephrine at 9mL

$$Volume=\frac{450 kg ×0.02 mg/kg}{1 mg/ml}$$

$$Volume=9 ml$$

* 10% Tolazoline at 0.12mL (0.24mL for mild cases and 0.48mL for severe cases)

$$Volume\_{1}× Conc.\_{1}=Volume\_{2}×Conc.\_{2}$$

$$0.6ml×20\frac{mg}{kg}=Volume\_{2} ×Conc.2$$

*12mlmg/kg= Volume2 x 100mg/kg*

*Volume2= 12mlmg/kg/ 100 mg/kg*

*Volume2= 0.12ml*

For mildly depressed animals: **2** times xylazin dose: 0.12 ml x 2= *0.24ml*

For severely depressed animals: **4** times xylazin dose: 0.12 ml x 4= *0.48ml*

**Equipment**

Halter for restraint

Cotton swabs soaked in 70% isopropyl alcohol

19-gauge 1” needles

1- 10ml syringe

2% Lidcocaine

Atropine

Epinephrine

10% Tolazonine

**Safety considerations:**

* Check the physical restraints so as to make certain that the head is adequately secured.
* Ensure that the needle is held firmly so as to prevent injury, especially to the eye.