**IV Regional Block**

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| Purpose/Aim | * Blocking of limb to provide local analgesia to area below tourniquet * Used for surgery on the foot such as amputation of a digit, tumor removal |  |  |
| Advantages | * Possible to perform surgery on a standing animal, reduce risks associated with general anesthesia, no need for anesthesiologist * Use of local anesthesia reduces volume of general anaesthetics, if used Low risk of infection * Rapid effect of analgesia * Simple technique * No complex equipment required |  |  |
| Drugs | 2% Lidocaine  Also possible - Bupivacaine, Mepivacaine | 5 - 10 ccs | Used 10 ccs lidocaine in cow #138, weighing ~ 400 kg |
| Landmarks | Forelimb: | * Dorsal metacarpal vein * Palmar digital vein * Dorsal digital vein |  |
|  | Hindlimb: | * Lateral saphenous vein, cranial or lateral branches * Lateral plantar vein * Lateral plantar digital vein |  |
| Procedure/Technique | 1. Adequately restrain animal. 2. Apply tourniquet proximal to carpus/tarsus. Allow a few minutes for vein to engorge 3. Clean and shave the area to be injected 4. Insert a butterfly catheter into the vein, and then inject 5-10 ccs of lidocaine with syringe. 5. Remove needle, apply pressure immediately and massage to prevent haematoma 6. Wait 10 - 15 minutes for drug to take effect 7. Leave tourniquet in place for maximum 90 minutes to maintain effect of anaesthesia |  |  |
| Complications | * Cardiac arrhythmia or cardiac arrest due to injection of lidocaine in vein with inadequate tourniquet * Failure of effect - due to failure of tourniquet [too loose] or insufficient time * Haematoma at site of insertion of catheter/injection * Further local analgesia may be required to completely anaesthetize the area between the digits |  | Special consideration was taken not to exceed half of the toxic dose in cattle across all 5 procedures performed. |