DISTAL PARAVERTEBRAL BLOCK

Why do we use this block?

Standing laparotomy surgery: caecotomy, rumenotomy, cystotomy, abomasal displacement and management of volvulus and intestinal obstruction.

Why do we use Lidocaine?

Commonly used due to the ease of administration. The efficacy profile of lidocaine as a local anaesthetic is characterized by a rapid onset of action and intermediate duration of efficacy. Longer-acting substances such as bupivacaine are sometimes given preference for spinal and epidural anaesthesias; lidocaine, though, has the advantage of a rapid onset of action.

MOA: alters signal conduction in neurons by blocking the fast voltage-gated Na+ channels in the neuronal cell membrane responsible for signal propagation, the membrane of the postsynaptic neuron will not depolarize and will thus fail to transmit an action potential. This creates the anaesthetic effect by not merely preventing pain signals from propagating to the brain, but by stopping them before they begin.

Typical onset: Within 10 minutes of injection.

Onset seen with bovine patient: #588: N/A

Typical duration of analgesia: 90 minutes.

Duration of analgesia in bovine patient #588: N/A

Common side effects: Common side effects with intravenous use include sleepiness, muscle twitching, confusion, changes in vision, numbness, tingling, and vomiting. It can cause low blood pressure and an irregular heart rate.

Contraindications: heart block, second or third degree, severe sinoatrial block,serious adverse drug reaction to lidocaine or amide local anesthetics, hypersensitivity to corn and corn-related products, concurrent treatment with quinidine, flecainide, disopyramide, procainamide (class I antiarrhythmic agents).