Does the Use of Intratesticular Blocks in Cats Undergoing Orchiectomies Serve as an Effective Adjunctive Analgesic?

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My name is Eric Fausak. One of the authors of the Knowledge Summary 'Does the Use of Intratesticular Blocks in Cats Undergoing Orchiectomies Serve as an Effective Adjunctive Analgesic?' at Bel-Rea Institute of Animal Technology. We are part of a veterinary technician training programme where veterinary technician students would apply their training, including anaesthetic monitoring in a spay neuter shelter environment that we call pre-clinicals.

Our pre-medication protocol for most neuters of cats include what we call kitty magic. A combination of dexmedetomidine, butorphanol and ketamine, while pain scores of our patients, postoperatively were not elevated or extremely high. We were curious if industry intratesticular blocks would be helpful after searching Pubmed and CAB abstracts we found two randomized control trials. The literature was variable in results, but a few themes started recurring lidocaine had more impact in terms of analgesia with patients premedicated with partial-μ opioid agonist than with the pure-μ opioid agonist. Clinical effect may have been affected by the duration of a procedure as lidocaine has a short half-life.

Something missing in these studies was consistency of pre-medication, Values measured, duration of postoperative evaluation and validated measures of pain evaluation, which were usually visual analog scales, intratesticular lidocaine injections in all studies had no serious adverse events. Lidocaine as a drug is inexpensive, and the injection is fairly easy to teach.

For our protocol of a partial-μ, we decided that it may be worth the cost of time and drug to add this procedure, but it may be just as beneficial to use a pure-μ dug with our pre-medication. One consideration is that intratesticular lidocaine resulted in faster patient recovery than using a pure-μ. According to Fernandez-Parra (2017) study. Future considerations we may want to investigate is inhalant sparing effect of intratesticular lidocaine like in Moldal (2013) study that found a significant decrease in mean arterial pressure with, intratesticular lidocaine with no effective analgesic, besides ketamine being on board in both groups, the control and the intratesticular lidocaine group, we'd also like to investigate, the potential of bupivacaine instead of lidocaine, which while bupivacaine has more risk associated with it, may have increased analgesic effect.

I hope this Knowledge Summary was helpful and inspires all members of veterinary practice to further investigate the evidence behind their routines. If it does, we also hope that you share what you learn as well.