Etodolac + Butorphanol for Surgical Analgesia

Opioids and NSAIDs have both been used to manage surgical pain in dogs. This study was done to evaluate the efficacy and safety of the NSAID etodolac, the opioid butorphanol, or a combination of both agents administered before ovariohysterectomy in dogs. The authors compared the isoflurane anesthetic requirements, behavioral pain scores, plasma cortisol and plasma glucose concentrations, mucosal bleeding times, and renal function. Eighteen dogs were randomly assigned to the 3 treatment groups. One group of dogs received etodolac orally, 1 hour before anesthetic induction; 1 group was given butorphanol IV immediately after endotracheal intubation; and a third group was given etodolac 1 hour before induction and butorphanol immediately following endotracheal intubation. Anesthesia was induced with propofol and then maintained by administration of isoflurane in oxygen. Dogs receiving the etodolac and etodolac/butorphanol treatments had significantly lower integrated plasma cortisol levels, and those on the combination had the lowest behavioral pain scores from extubation until the end of monitoring. There were no significant differences among the treatment groups in the other variables measured.

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COMMENTARY: Fortunately the vast majority of veterinarians administer analgesic drugs for elective surgeries on a routine basis. Some people have expressed concerns about giving NSAIDs prior to surgery, fearful that bleeding may be a problem. In this study there were no differences in mucosal bleeding times when the etodolac was administered, showing that for dogs undergoing surgical procedures etodolac is safe and that, in combination with butorphanol, is a good analgesic choice for dogs.

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