

Investigating Safer Sedation for Cats

Advancing patient care is one of the primary goals of the CCAH. Sometimes one of the best ways to achieve that is to fund research projects that lay a foundation for larger clinical trials that eventually make their way into practice. Thanks to CCAH donors who support these endeavors, veterinary anesthesiologist Bruno Pypendop recently published a study in *Veterinary Anaesthesia and Analgesia* that may lead to safer sedation techniques for cats.



His research examined the cardiovascular effects of dexmedetomidine, with or without MK-467, when given intravenously to cats. Dexmedetomidine is widely used to sedate animals or provide pain relief. However, the drug does come with adverse cardiovascular effects such as vasoconstriction and decreased heart rate.

“Our study showed that by adding MK-467 when administering dexmedetomidine, we can blunt some of its cardiovascular side effects without affecting its anesthetic/analgesic properties,” Pypendop said.

He pointed out that young, healthy cats are better able to tolerate the effects of dexmedetomidine, while older, sicker cats are more likely to suffer adverse effects, so its use is often avoided.

Several studies from Finland show MK-467 to be effective at mediating some of the negative cardiovascular effects in dogs and Pypendop was asked by colleagues there to pursue this initial study on cats. With the help of two primary CCAH grants, Pypendop and his team was able to launch an investigation into the efficacy of using MK-467 in cats. He approached the Winn Feline Foundation for further funding with the support of a matching commitment from the CCAH.

“Getting the initial evidence is really important as proof-of-concept and/or for garnering additional funding for larger clinical trials in the future,” Pypendop said. “Having the two faculty grants from the CCAH helped us attract the additional funding we needed to accomplish that.”

While MK-467 is still being explored through research and not commercially available, Pypendop said the drug shows promise as a means of improving sedation and anesthesia for cats, especially for older felines or those with systemic disease.