Research Note: **Luteinizing Hormone in Intact vs Neutered Cats**

This study* tested the accuracy of a commercial point-of-care luteinizing hormone (LH) test in differentiating intact versus neutered cats. Spayed or neutered animals typically have higher LH levels than intact animals, as negative feedback from gonadal sex hormones on the pituitary and hypothalamus has been removed. Serum LH was evaluated in intact female ($n = 87$), spayed female ($n = 129$), intact male ($n = 19$), and neutered male ($n = 34$) cats. Overall sensitivity and specificity were 89.3% and 92.6%, respectively. Overall accuracy was 91.1%, although the LH surge at the onset of estrus may cause false-positive results in intact females. The commercial point-of-care LH test may be a useful adjunct to patient history and physical examination for determining reproductive status in cats.

*Zoetis supplied the Witness LH tests and, at the time of this study, paid the salary of MR Krecic.

Source

Krecic MR, DiGangi BA, Griffin B. Accuracy of a point-of-care luteinizing hormone test for help in distinguishing between sexually intact and ovariectomized or castrated domestic cats. *J Feline Med Surg*. 2018;20(10):955-961.

Research Note: **Concurrent Administration & Pharmacokinetics of Extended-Release Levetiracetam**

This study evaluated the pharmacokinetics of extended-release levetiracetam administered as a single agent or concurrently with phenobarbital or zonisamide in epileptic dogs. Results indicated that concurrent administration with phenobarbital led to variability in pharmacokinetics of extended-release levetiracetam, an effect that was not noted with zonisamide. The authors noted that higher doses of extended-release levetiracetam may be needed in some dogs to achieve concentrations considered therapeutic in humans and that drug monitoring may help to determine the optimal dose in individual patients.

Source

Muñana KR, Otamendi AJ, Nettifee JA, Papich MG. Population pharmacokinetics of extended-release levetiracetam in epileptic dogs when administered alone, with phenobarbital or zonisamide. *J Vet Intern Med*. 2018;32(5):1677-1683.