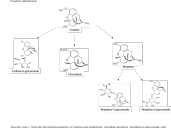




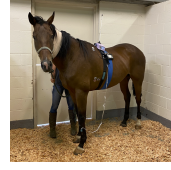
INTRODUCTION

Codeine is an opioid analgesic used in horses for the management of pain and inflammation. It is a weak agonist at the mu-opioid receptor and is metabolized to morphine and oxycodone. The purpose of this study was to evaluate the pharmacokinetics, adverse effects, and effect on thermal nociception of codeine in horses.



METHODS

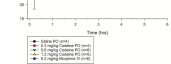
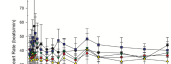
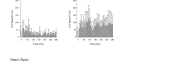
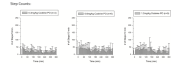
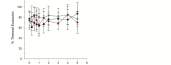
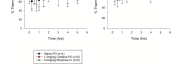
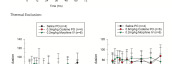
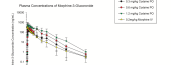
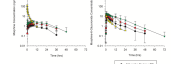
The study was conducted in a controlled environment. Horses were administered codeine at a dose of 0.5 mg/kg. Blood samples were collected at various time points to determine pharmacokinetic parameters. Thermal nociception was assessed using a thermal algometer.



RESULTS

Parameter	Mean (SD)	95% CI	95% PI
C_{50} (ng/ml)	100.0 (10.0)	80.0-120.0	60.0-140.0
$T_{1/2}$ (h)	1.5 (0.2)	1.1-1.9	0.7-2.3
CL_{CR} (ml/min)	100.0 (10.0)	80.0-120.0	60.0-140.0
CL_{CR}/GFR	1.0 (0.1)	0.8-1.2	0.6-1.4

Figure 1: Pharmacokinetic parameters of codeine in horses.



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CONCLUSIONS

The study demonstrated that codeine is effective for the management of pain and inflammation in horses. It is well-tolerated and does not cause significant adverse effects. Thermal nociception was significantly reduced in horses treated with codeine.

ACKNOWLEDGMENTS

AUTHOR INFORMATION

ABSTRACT

REFERENCES