Decreasing Opioids in the Emergency Room: 
Pramipexole Adjuvant Cuts Opioid Dose in Half in Acute Renal Colic Patients 
Cara Girardi1,2, Joseph Duronio1,2, Ryan Patton1,2, MSIII, Allison Mainhart1,2, Kori Brewer1,2, PhD

INTRODUCTION

Renal colic is a common emergency room presentation requiring acute pain management. Current standard of care: opioid regimen, including morphine, when NSAIDs are contraindicated. Renal colic pain management is a potential area to reduce opioid use with alternative methods. Preclinical animal studies suggest adding Pramipexole, a dopamine-agonist typically used in Parkinson’s disease, to morphine may provide a greater analgesic effect than morphine alone.1

RESULTS

Experimental and Control Arms Shows Similar Average Pain Decrease Over Time with Both 0-10 Pain Scale and Visual Analog Scale

[Graph showing pain rating and VAS pain rating over time]

Drug Effect Questionnaire: Experimental Arm trends LOWER Overall for All Questions

[Graph showing questionnaire results with comparison between control and experimental arm]

LOESS Plot Predicts Superior Pain Management with Experimental Arm

[Graph showing LOESS plot with comparison between control and experimental arm]

REFERENCES


ACKNOWLEDGEMENTS & CONTACT

Cara Girardi and Joseph Duronio
ECU Health Department of Emergency Medicine
East Carolina University
Greenville, North Carolina 27858
duronioj21@students.ecu.edu
girardic21@students.ecu.edu

EARLY DATA SHOWS PRAMIPEXOLE + 1/2 MORPHINE TO HAVE A COMPARABLE ANALGESIC EFFECT TO STANDARD MORPHINE

DISCUSSION

Should the study arm see a significant decrease in these pain scores, we can conclude that Pramipexole as an adjuvant to morphine is just as effective as morphine alone in reducing acute renal colic in an emergency department setting. To determine Pramipexole’s broader scope of analgesic effects future studies will apply similar protocol to additional acute pain conditions.