FURST AID: NSAIDS RESPONSIBLE USE IN LARGE ANIMALS
Andee Frei, BVMS (Hons)

- Western trail and horsemanship
- Yosemite foothills, Ca
- Cal Poly, San Luis Obispo, Ca
- University of Glasgow, Scotland
- Dairy cow stress research
- Steinbeck Peninsula Equine, Ca
- OSU Large Animal Medicine Residency and Master’s Program
Large Animal NSAID Use

- What are NSAIDs?
- Risks and adverse effects
- Appropriate use in equids
- Appropriate use in ruminants
- Appropriate use in swine
- Key takeaways
Poll: How confident are you in selecting and giving NSAIDs?

a. Very confident
b. Somewhat confident
c. Somewhat unsure
d. Very unsure
e. What’s an NSAID?
Non-Steroidal Anti-Inflammatories

- Flunixin (banamine)
- Phenylbutazone (bute)
- Aspirin
- Ketoprofen

COX 1

COX 2

Prostaglandins

- Blood clotting
- GI lining
- Liver
- Kidneys
- Pregnancy

Arachidonic acid

- Firocoxib (equioxx)
- Meloxicam

Inflammation

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Major Effects

• Action in the central nervous system and peripheral tissues
• Reduces inflammation and stops pain signals = improved comfort
• Anti-endotoxic effects
• Narrow safety margin
• Many unsafe for neonates
• Route given is IMPORTANT
Common Equine NSAIDs

- Flunixin: oral, IV
- Phenylbutazone: oral, IV
- Firocoxib: oral
- Diclofenac: topical
When/how to give NSAIDs

• Look out for adverse effects
• Be prepared to monitor
  • Water intake
  • Manure character
  • Colic signs / inappetence
• As directed by your vet
  • Appropriate dose
  • Directed frequency
  • Anticipated results
When to **steer clear** of NSAIDs

- Have not called your vet
- Bute: not for pregnant/lactating mares
- Doses too close together
- **Taking other NSAIDs**
- Dehydrated/not drinking
- Diarrhea
- Not eating
- Weak, signs of bleeding
- History of kidney disease
Performance Horses

- NSAID use regulated for competing animals
- Welfare is paramount
- United States Equestrian Federation
  - Number of NSAIDs using
  - When last given
  - Specific for each drug
- FEI, WPRA, NCHA
NSAIDs for Ruminants and Swine

• Swine:
  • Flunixin (Banamine-S): IV

• Ruminants:
  • Flunixin: IV, transdermal
  • Licensed vs off-label use

• ALL PRODUCTION ANIMALS:
  • Drug Withdrawal Times
  • Milk & muscle retain drugs
  • Legal requirement
Production Animal Specifics

Adverse effects:
- Injection site irritation
- Ruminants:
  - Abomasal ulcers (4th stomach compartment)
- Swine:
  - Especially prone to gastric ulcers

When not to give:
- Not eating
- To breeding sows
- Suspected dehydration
- Caution with pregnant cows
Poll: How confident are you in selecting and giving NSAIDs?

- a. Very confident
- b. Somewhat confident
- c. Somewhat unsure
- d. Very unsure
- e. What’s an NSAID?
Questions?
References


