A comprehensive review of adverse events associated with non-steroidal anti-inflammatory drug treatments in dogs in the UK

Jane Pigott¹, Malcolm Cobb²,
Declan O'Rourke²

¹ Gurrane, Dromagh, Mallow, Co.Cork, Ireland
² School of Veterinary Medicine and Science, University of Nottingham,
Sutton Bonington, Leicestershire LE12 5RD, UK

Non-steroidal anti-inflammatory drugs (NSAIDs) are used in the management of painful and inflammatory conditions in dogs. The use of these agents is not without risk, as adverse events are observed. This study aims to evaluate the nature and frequency with which reactions occur following the use of carprofen and meloxicam.

This study used data extracted from the suspected adverse reaction surveillance scheme (SARSS) database of the Veterinary Medicines Directorate (April 1992–October 2011). The data for each active was separated on the basis of whether the reported use was authorised or unauthorised. Using the Veterinary Dictionary for Drug Related affairs, the clinical sign provided in the original information was converted into the 'preferred term', and allocated the appropriate 'system organ class' (SOC).

The total number of signs reported in each SOC was calculated, and the frequency with which each system was reported

determined. A breakdown of the signs reported for the 5 most prevalent SOC categories was then completed. The proportion of signs in each SOC category associated with authorised use was compared for carprofen and meloxicam. A Chi-squared test was used to compare the frequency with which each reaction occurred for each of the two actives (GraphPad InStat 3, produced by GraphPad Software). Significance was set at $P < 0.05$.

The data of this study reported 676 cases of adverse reactions to carprofen and 567 cases of adverse reactions to meloxicam since the actives were authorised in the UK. The most common adverse reactions reported for authorised use of carprofen were systemic disorders (37.06%), digestive tract disorders (24.43%), neurological disorders (7.36%) and blood and lymphatic system disorders (5.87%). The most common adverse reactions reported for authorised use of meloxicam were digestive tract disorders (37.76%), systemic disorders (32.74%), neurological disorders (5.69%), and blood and lymphatic system disorders (3.99%).

Meloxicam was found to cause more digestive tract disorders, cardio-vascular system disorders and reproductive tract disorders than carprofen, whereas carprofen caused more application site disorders, hepato-biliary disorders, systemic disorders, blood and lymphatic system disorders, ear and labyrinth disorders, neurological disorders and musculoskeletal disorders than meloxicam.

Systemic and digestive tract disorders were the most commonly reported reactions following unauthorised use of both actives.

This study provides a comprehensive evaluation of carprofen and meloxicam related adverse reactions in the dog in the UK.

The novel use of fluroscopy for guided insertion of thoracostomy tubes in dogs

Tonje Trinterud, Jackie Demetriou

Dick White Referrals, Six Mile Bottom, UK

INTRODUCTION

Thoracostomy tubes are used for removal of intrathoracic accumulation of fluid or air. The current standard for insertion of thoracostomy tubes is 'blind' placement technique. Not being able to visualize the position of the tube during placement may lead to iatrogenic damage to the intrathoracic structures or failure of drainage.

AIM

Prospectively compare fluoroscopically guided thoracostomy tube placement with 'blinded' tube placement

MATERIAL AND METHODS

Dogs were divided into two groups, 'blinded placement' (BP) or fluoroscopically guided placement (FGP).

Wide bore thoracostomy tubes were used in both groups.

Dogs with pleural effusion were assigned to BP, while FGP was performed in dogs undergoing lateral thoracotomy.

Tube position, minor/major adjustments, tube insertion time and time to satisfactory tube placement documented on radiographs and resulting in drainage were recorded.

Minor adjustments were defined as adjustments performed without removing the tube from thorax. Major adjustments were defined as adjustments requiring removal and re-insertion of the tube in the thorax.

RESULTS

Twelve adult dogs (six in each group) were included.

Tube position, BP: 2/6 tubes entered thorax through 6th intercostal space (IC), 4/6 through 7th IC, cranial tip of tube ended at 1st rib in 2/6, 3rd rib 2/6 and 4th rib 2/6 tubes, the tube tip was positioned in ventral third of thorax in 5/6 and in middle third in 1/6 dogs

Tube position, FGP: 2/6 tubes entered thorax through 6th intercostal space (IC), 4/6 through 7th IC, cranial tip of tube ended at 2nd rib in 6/6 tubes, the tube tip was positioned in ventral third of thorax in 3/6 and in middle third in 3/6 dogs

Minor adjustments: BP: 2/6, FGP: 3/6

Major adjustments: BP: 2/6, FGP: 0/6

Mean placement time: BP: 2min 30sec, FGP: 1min 50sec

Mean time to documented satisfactory placement and drainage: BP: 27min 30sec, FGP: 1min 50sec