What is the role of veterinary science?

Epidemiology of colic in working equids with reference to equine fairs in India - a review of 237 cases



## The Brooke India

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#### Summary

- 237 cases of colic presented to Brooke vets at equine fairs were reviewed
- The most common diagnosis seen was impaction colic
- This could potentially be caused by changes in feeding regimen combined with dehydration
- Results of this study may be used to inform educational programmes for equine owners regarding proper feeding

and watering at equine fairs as a trial intervention to attempt to reduce the incidence of colic at these events

Figure 1: Equids congregate at an equine fair



#### Introduction

Colic remains a significant problem in working equine animals. Equine fairs are places where 3,000 to 20,000 equids congregate for 5–15 days for trading purposes (Figure 1). To get here animals travel long distances, often without adequate feed and water. Also, anecdotal evidence indicates that feeding practices vary greatly between the fair sites and at home. The aim of this study was to investigate the epidemiological features of common types of colic that are presented to Brooke vets during equine fairs in order to inform potential preventive measures.

### Methods

- Clinical records from animals diagnosed with clinical signs of abdominal pain in 12 equine fairs were reviewed
- Age, species (horse, donkey and mule), sex and work type [transportation of brick by cart (BKC), transportation of goods by cart (TGC), transportation of brick by pack (BKP), transportation of people by cart (TPC), transportation of goods by pack (TGP), breeding and trading (BT), riding, ceremonial and foal] were recorded
- Colic was classified as 'impaction' with normal, decreased or absent noise on gastrointestinal auscultation or 'spasmodic' with increased gastrointestinal noise

### Results

- 237 (13.2%) equids presented to Brooke vets at the fair had colic
- Affected animals were between 3 months and 20 years old (median 4 years)
- More cases 122 (51.4%) were recorded in male than female animals
- The largest numbers of cases were seen in horses (n=151) followed by mules (n=83) and donkeys (n=3)
- Transportation of bricks by cart were the most commonly recorded work type (Figure 2)
- Impaction colic was the most frequent diagnosis (n=154) followed by spasmodic colic (n=82)



 Cases with these two diagnoses survived to discharge from the fair clinic while one case died without a diagnosis (0.4%)



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#### Conclusions

The most common diagnosis was impaction colic. We assume that this is due to use of low digestible coarse feed and dehydration. Previous reports suggest change in diet is associated with colic<sup>1</sup>; however access to drinking water has had limited consideration. Results of this study may be used to inform educational programmes for equine owners regarding proper feeding and watering at equine fairs as a trial intervention to attempt to reduce colic at these events. Future studies examining frequency of colic in non-fair populations will help to put these results into context.

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Reference: 1. Goncalves et al. (2002) Vet Res 33 641–652

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