

A Retrospective Study on Equine Cases Referred to University Veterinary Hospital, UPM from 2005-2009

Fauziah Mohd Said & ¹Noraniza Mohd Adzahan

*¹Department of Veterinary Clinical Studies
Faculty of Veterinary Medicine, Universiti Putra Malaysia*

Abstract

A retrospective study was carried out to determine the prevalence and total number of equine cases reported to University Veterinary Hospital (UVH), UPM from year 2005 to 2009 and to determine the relationship between case occurrence and type of purpose of horses. Data were gathered from UVH records. A total of 1,521 equine cases were recorded from 22 horse establishments, involving eight different purposes of horses with eight and 30 categories of general and specific clinical problems, respectively. The occurrence of equine cases in year 2005 was 228 (15.0%), 2006 was 216 (14.2%), 2007 was 372 (24.5%), 2008 was 340 (22.4%) and 2009 was 365 (24.0%). The most common general clinical problems were musculoskeletal problems, traumatic injuries and gastrointestinal problems. However, based on specific conditions, traumatic injuries showed the highest percentage of occurrence within the 5 years.

Keywords: retrospective study, equine cases

Introduction

The equine industry in Malaysia is expanding due to an increase in the number of imported and local horses throughout the country as well as to an increased number of equestrian sports. Most horses owned by individual owners are used for leisure rides with occasional participation in equestrian events such as show jumping, dressage, eventing and endurance. Horses owned by private clubs are commonly used for riding schools and equestrian sports while horses owned by government bodies are mainly used for patrolling and ceremonial events. This project was carried out to determine the prevalence of equine cases referred to University Veterinary Hospital (UVH), UPM from year 2005 to 2009, to determine factors contributing to the number of new cases referred and to identify the most common clinical problems in horses under local conditions.

Materials and Methods

Data were obtained from case records of UVH, UPM from year 2005 to 2009. The information includes case number, horse identification, horse establishment and clinical problems. Descriptive analysis was carried out on all data obtained. Additional information on the availability of clinicians on duty and dates of horse competitions and events from year 2005 to 2009 were gathered through verbal communication with equine clinicians.

Results and Discussion

Total Number of Cases 2005 to 2009

A total of 1,521 of equine cases were referred to UVH, UPM from year 2005 to 2009. The highest number of cases was in year 2007 with 372 (24.5%) cases followed by 2009 with 365 (24%) cases and 2008 with 340 (22.35%) cases. The prevalence of equine cases from year 2005 to 2009 showed no significant pattern between the years. However, there was an increased number of cases coming into UVH due to additional number of equine clinicians in UVH.

Cases Based on Horse Establishment

A total of 22 equine establishments were registered as UVH clients from year 2005 to 2009. Twelve horse establishments were owned by the government bodies, such as Dewan Bandaraya Kuala Lumpur (DBKL) at Cheras, Titiwangsa, and Kiara, Polis Diraja Malaysia (PDRM) at Cheras, Putrajaya and Kiara, Majlis Perbadanan Klang (MPK), Institut Sukan Negara (ISN), Angkatan Tentera Malaysia (ATM), MARDI, Penjara Kajang and Universiti Utara Malaysia (UUM), Kedah. There were a total of eight horse establishments that were owned by private bodies: El-Mina Sg Buloh, Templer Park, ARL Putrajaya, Ar-Raudhah, Penn Endurance, Ranhill, Tun Mahathir and individual owners (horse owners with less than five horses). Universiti Putra Malaysia (UPM) owned two other establishments, which were the UPM Equine Centre and UVH stables. The highest number of cases admitted were horses owned by individual owners with 256 (16.83%) cases and from PDRM Cheras with 186 (12.23%) cases, followed by DBKL Titiwangsa, Ar-Raudhah and UPM Equine Centre with 131 (8.61%), 127 (8.35%) 121 (7.96%) cases, respectively. Although there was a positive relationship between total population of horses and the number of cases attended at a particular establishment, it was observed that few establishments with smaller horse population had a high number of clinical cases indicative of improper management either in taking care of the horses or the horses were overtrained.

Cases Based on Types of Work

The purposes of the horses were categorized into eight groups. There were patrolling, endurance, polo, riding school, dressage, show jumping, leisure and multipurpose (horses used for more than one purpose). The highest number of cases involved the patrolling horses with 495 (32.54%) cases, followed by multipurpose horses with 329 (21.63%) cases and endurance horses with 233 (15.32%) of the total number of cases. The percentage of cases was actually positively correlated with the number of horses involved based on different purposes.

Cases Based on General Clinical Conditions

There were 11 groups of general clinical conditions based on body systems. The highest number of cases was musculoskeletal problem with 551 (36.2%) cases, traumatic injury with 298 (19.8%) cases, followed by gastrointestinal problem with 166 (11.7%) cases. Urinary and reproductive problems were groups with the least number of cases with the

total of 3 (0.2%) and 7 (0.5%) cases, respectively. Other cases with frequency of less than five cases throughout the five years were categorized in the miscellaneous group, representing 13 (0.9%) cases. Similar findings were reported by other studies (Kaneene et al., 1997; Egenvall et al., 2006) and lameness was the most common diagnosis in these equine cases.

Cases Based on Specific Clinical Conditions

There were 30 specific clinical conditions identified. The highest percentage were traumatic injury with 298 (19.6%) cases, non-specific musculoskeletal problems with 195 (12.8%) cases, followed by colic with 166 (10.9%) cases. Musculoskeletal problem was subdivided into nine groups. The highest number of cases was represented by the non-specific musculoskeletal problem with 195 (36.04%) cases, followed by foot problem 79 (14.60%) cases, joint problem with 68 (12.57%) cases, tendinitis with 66 (12.20%) cases, lymphangitis with 50 (9.24%) cases, back pain with 37 (6.84%) cases and myositis, saddle sore and fracture with 29 (5.36%), 13 (2.40%) and 4 (0.74%) cases, respectively. The second major clinical problem occurred in horses was skin problem that was subdivided into five groups, which were dermatophilosis with 39 (2.56%), habronemiasis with 10 (0.66%), hypersensitivity with 68 (4.47%), proud flesh with 21 (1.38%) and Queensland itch with 17 (1.12%) cases.

Conclusion

Percentage of cases referred to UVH, UPM increased in year 2007 (24.5%), 2008 (22.8%) and 2009 (24.0%) compared to year 2005 (15.0%) and 2006 (14.2%). Increased number of new cases was associated with the increased population of horses, resulting in increased number of UVH clients and subsequently due to the availability of clinicians on duty. There was a positive relationship between the number of cases referred to UVH and the occurrence of horse competitions and events resulting to an increase incidence of clinical problems. The major clinical problems in horses under local conditions were associated with musculoskeletal problems (35.63%), traumatic injuries (19.59%) and gastrointestinal problems (11.70%).

References

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