

Cross-sectional Questionnaire Survey of Horse Owners

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Introduction

With growing numbers of aged horses, geriatric medicine is becoming increasingly important in equine veterinary practice. Although horse owners are concerned about the health and welfare of their aged horse there may be incorrect or under recognition of some diseases and health problems.



Aims

1. To assess the demographics, management and health of the equine geriatric population in the UK
2. To investigate the prevalence of owner reported clinical signs and disease

Methods

A total of 7350 randomly selected veterinary registered horse owners were mailed postcards aimed at identifying the age demographics of the population. Clients owning horses/ponies aged ≥ 15 years were mailed a self-administered postal questionnaire, designed to obtain information on management, routine healthcare and disease for their geriatric horses. The effect of increasing age on both the use of preventive health care and the presence or absence of clinical signs and disease was assessed using either Kruskal Wallis or Mann-Whitney U tests to assess the equality of population medians.



Results

Study Population

A useable response rate of 28.5% (n=2097) was obtained for the postcards, providing age distribution data for 7088 horses (Figure 1). A useable response rate of 80.2% (n=918/1144) was obtained from the postal questionnaire survey. The population composition of the animals enrolled in this study is similar to that previously described for the UK equine population.

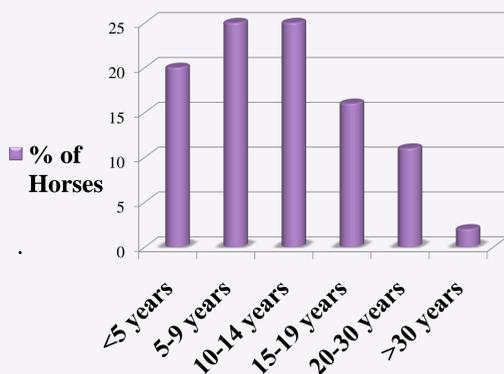


Figure 1: Age distribution of horses (n=7088) owned by randomly selected veterinary registered clients in the North West and Midlands of the UK

Routine Healthcare

Increasing age (from 15 years upwards) was associated with:

- decreased frequency of farrier visits ($p < 0.001$) and being unshod ($p < 0.001$)
- decreased likelihood of vaccination against either equine influenza or tetanus (both $p < 0.001$)
- decreased likelihood of routine veterinary visit within the previous 12 months ($p < 0.001$)

Owner Reported Clinical Signs

The median age of horses with at least one clinical sign was greater than the median age of horses with no clinical signs ($p < 0.001$). Clinical signs reported are described in Table 1, and the majority of signs recognised by owners were significantly associated with increasing age of the horse.

Clinical Sign	%	Median Age (Years)		P Value ¹
		Sign observed	Sign not observed	
At least one clinical sign	77	20.9	18.08	<0.001
Muscle Loss	19	23.5	19.08	<0.001
Weight Loss	17	24.7	19.2	<0.001
Changes to Hoof Quality/Hoof Problems	14	20.3	20.00	0.1
Coughing	14	20.0	19.2	0.3
Changes to Shedding/Moulting	13	26.0	19.2	<0.001
Reduced Ability to Exercise	12	23.1	19.3	<0.001
Changes to Coat Quality	11	26.1	19.2	<0.001
Quidding/dysphagia	10	27.0	19.2	<0.001
Increased Urination	9	22.0	19.4	<0.001
Ocular Discharge	9	21.0	19.8	0.01

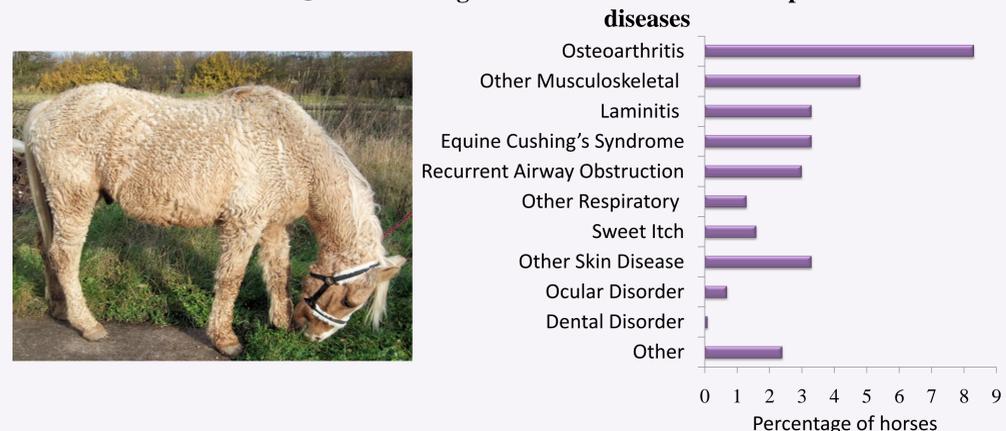
Table 1: Top 10 clinical signs reported in the sample population (n=918) of geriatric horses in a postal survey of randomly selected veterinary registered horse owners in the North West and Midlands of the UK

¹ Mann-Whitney U P-value for difference in median age

Owner Reported Disease

- 58% (n=532) of horses had suffered from at least one episode of disease within the previous 12 months
- 17.7% had suffered from 2 or more diseases
- 30.7% of owners (n=282) reported that their horse currently suffered from a known disease or disorder
- Median age of horses suffering from an owner reported known condition was greater than median age of horses without reported current conditions ($p = 0.02$)

The owner reported prevalence of the most common known diseases or disorders is shown in Figure 2.



Conclusions

There was a high frequency of clinical signs reported by owners, yet only 31% of horses were reported to have a known disease or disorder. It is possible that owners of geriatric equines may mistakenly regard changes in their animals as benign signs of aging rather than disease, or are unaware of the significance of clinical signs, and therefore may not seek appropriate veterinary attention. In addition, the provision of routine preventive health care appears to decrease as horses age. Targeted owner education and increased veterinary attention in the management of geriatric horses should aid disease prevention and improve welfare in the geriatric population.

