

Welfare of the geriatric horse: owner's perceptions versus veterinary findings

Discusses welfare problems faced by geriatric horses as a result of reduced veterinary attention, owners' under-reporting and under-recognition of clinical signs, as well as their unreliable assessment of quality of life.

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Word Count : 997

Introduction

Geriatric horses, defined as 15 years and over, represent a substantial proportion of the general equine population, with increasing age generally being associated with higher prevalence of health disorders (Ireland *et al.*, 2011a; McGowan *et al.*, 2010b). Studies conducted in the United Kingdom (UK) by Ireland *et al.* (2012, 2011a,b) on 918 geriatric horses investigated the provision of routine health-care measures, prevalence of owner-reported clinical signs and disease, and compared those reports with findings of veterinary clinical assessments. An evaluation of horses' quality of life (QOL) as perceived by owners and factors contributing to owners' decisions for treatment or euthanasia were also performed. Horses were randomly selected from veterinary registered owners using a self-administered postal questionnaire. Veterinary examination by a veterinarian blinded to the results was performed on 200 of these horses within two months of return of the questionnaires.

Discussion

Provision of routine health-care measures was found to decrease with increasing age of the horse, with only 68.7% of horses having received a routine veterinary visit in the past 12 months (Ireland *et al.*, 2011a). Mellor *et al.* (2001) found similar trends for the general UK equine population, while lower estimates were obtained in Australia from owners of geriatric horses recruited from an equestrian organisation (McGowan *et al.*, 2010a). Reduced routine health-care measures included vaccination, worming and hoof care, with retired horses having less access to these procedures than horses still performing some kind of activity (Ireland *et al.*, 2011a; McGowan *et al.*, 2010a; Mellor *et al.*, 2001).

As aging is associated with immunosenescence, decreased vaccination and anthelmintic dosing can predispose geriatric horses to diseases and seriously compromise health and welfare (Ireland *et al.*, 2011a). Reduced frequency of hoof care might be explained by reduced level of activity, especially in retired horses (McGowan *et al.*, 2010a) but could prevent early detection of hoof problems caused by degenerative changes or secondary to other disorders (Ireland *et al.*, 2011a), thus preventing early disease diagnosis. In addition, reduced hoof care may result in hoof deformities leading to increased wear of articulations, potentially causing pain, and hence altering the ability of the horse to perform normal behaviours (e.g., walking or lying down).

Studies in the UK (Ireland *et al.*, 2012) and Australia (McGowan *et al.*, 2010b) showed that owner-reported clinical signs and veterinary findings differ with horse age, suggesting that under-reporting or under-recognition of diseases may be due to clinical signs being interpreted as normal signs of aging or not significant (Ireland *et al.*, 2012). As frequency of veterinary attention decreases in older horses (Ireland *et al.*, 2011a; McGowan *et al.*, 2010a), some disorders that are undetectable by owners until the advent of serious adverse effects may remain untreated, possibly decreasing animal welfare. Additionally, undetected musculoskeletal, ophthalmic and dental problems may change behaviour and result in excessive shying, aggression or resistance to the bit. These "misbehaviours" may result in physical punishment or use of more coercive bits and side reins, further compromising welfare.

Factors affecting QOL include social relationships, mental stimulation, health, nutrition, stress (feelings associated with a specific emotionally unpleasant experience) and control over the environment (an animal's perception of its ability to influence its environment or its relationships with it) (McMillan, 2003). Ireland *et al.*, (2011b) showed that owners viewed their horses' QOL as good to excellent on a daily average. However, when asked to rank factors affecting QOL, owners preferentially ranked comfort, exercise regime and grooming highly. In addition, owners' satisfaction with QOL was found to be lower for horses with a known disease or disorder (Ireland *et al.*, 2011b). While diseases and health disorders are likely to affect QOL, an owner's perception of their impact on QOL might differ from that of the horse due to anthropocentrism, hence leading to inaccurate assessment of QOL. These results also indicate important discrepancies in QOL assessment between assessors. Since QOL was one of the most important factors affecting an owner's

decision for treatment options or euthanasia (Ireland *et al.*, 2011b), this study highlights the urgent need to develop more reliable standards of QOL assessment for geriatric horses.

The study design and sample were shared by all three papers and it is possible that errors in methodology and analysis resulted in decreased accuracy of the results. However, other studies conducted in the UK and Australia obtained similar results to the studies presented here, hence reinforcing their credibility. Other limitations included the two-month period between receiving the questionnaires and veterinary examination where additional clinical signs or disease may have appeared, exaggerating the difference between owner evaluations and veterinary examinations (Ireland *et al.*, 2012). Additionally, veterinary examination was performed in summer, possibly creating bias due to seasonal clinical signs (Ireland *et al.*, 2012).

Moreover, these studies were conducted on horses registered with veterinary practices, possibly leading to over-estimation of the level of veterinary care provided to geriatric horses (Ireland *et al.*, 2011a). This is confirmed by McGowan *et al.* (2010a), who estimated lower levels of veterinary care among non-veterinary registered geriatric horses. While these studies were performed in different countries, and thus might not be comparable, their results nonetheless suggest that geriatric horses registered with a veterinary practice receive more veterinary care than other horses in the population. Finally, recall bias of owner-reported clinical signs and disease may have occurred, with more serious health problems or conditions requiring veterinary intervention being more easily recalled than problems perceived as less significant (Ireland *et al.*, 2012).

Conclusions

Reduced routine health-care procedures and veterinary examination in geriatric horses raise concerns for their health and welfare. In addition, discrepancies between owner-reported clinical signs and diseases and the results of veterinary examination highlight the need for improved veterinarian-owner communication, owner education and increased involvement of veterinarians and other providers of equine health. Discrepancies between veterinary and owner assessment of QOL and the importance assigned by owners to QOL in their decision for treatment or euthanasia highlight the urgent need to develop more reliable QOL assessment standards, possibly by combining the strengths of owner and veterinary assessment.

References

- Ireland, J.L., Clegg, P.D., McGowan, C.M., McKane, S.A., Chandler, K.L., Pinchbeck, G.L. (2012) Comparison of owner-reported health problems with veterinary assessment of geriatric horses in the United Kingdom. *Equine Veterinary Journal* 44:1, 94-100.
- Ireland, J.L., Clegg, P.D., McGowan, C.M., McKane, S.A., Pinchbeck, G.L. (2011a) A cross-sectional study of geriatric horses in the United Kingdom. Part 2: Health care and disease. *Equine Veterinary Journal* 43:1, 37-44.
- Ireland, J.L., Clegg, P.D., McGowan, C.M., Duncan, J.S., McCall, S., Platt, L., Pinchbeck, G.L. (2011b) Owner's perceptions of quality of life in geriatric horses: a cross-sectional study. *Animal Welfare* 20: 4, 483-495.
- McGowan, T.W., Pinchbeck, G., Phillips, C.J.C., Perkins, N., Hodgson, D.R., McGowan, C.M. (2010a) A survey of aged horses in Queensland, Australia. Part 1: Management and preventive health care. *Australian Veterinary Journal* 88:11, 420-427.
- McGowan, T.W., Pinchbeck, G., Phillips, C.J.C., Perkins, N., Hodgson, D.R., McGowan, C.M. (2010b) A survey of aged horse in Queensland, Australia. Part 2: Clinical signs and owner's perceptions of health and welfare. *Australian Veterinary Journal* 88:12, 465-471.
- McMillan, F.D. (2003) Maximizing quality of life in ill animals. *Journal of the American Animal Hospital Association* 39:3, 227-235.
- Mellor, D.J., Love, S., Walker, R., Gettinby, G., Reid, S.W.J. (2001) Sentinel practice-based survey of the management and health of horses in northern Britain. *Veterinary Record* 149:14, 417-423.