

Demographics of the Older Horse

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In a recent National Animal Health Monitoring Systems (NAHMS) report, it was found that 7.5% of the approximately 10,000 horses that were surveyed were over the age of 20-year-old. From 1989 to 1999, the percentage of horses over the age of twenty that were presented to Tufts University School of Veterinary Medicine (TUSVM) rose from 2.2% to 12.5%. This increase could be due to an increase in the total population of older horses, concluding therefore that horses are living longer. Or the increase could be that owners are requesting more care for their elderly equine. Either way this has stimulated our interest at Tufts to look at this population of horses. Dr. Margaret Brosnahan and I conducted 2 demographic projects to define the problems of the geriatric horse. We approached this research from 2 different views.

Study 1 – TUSVM Hospital Cases 1989-1999

The first study was a retrospective study involving 467 older equine cases presented to Tufts University School of Veterinary Medicine' Large Animal Hospital (TUSVM) between 1989 and 1999. A horse was considered older if they were ≥ 20 years of age. A demographic profile included breed and gender. A health profile included type and number of diagnoses, level of veterinary care needed and outcome. The animals were subdivided into the following age categories: 20-29 and 30+. The categories were compared to each other.

A computer search was conducted to identify all horses > 20 years of age. 539 animals were identified. From this group, 467 files could be located. Several cases were eliminated from the study because of incomplete files. Each case was thoroughly reviewed using a survey tool to collect data on the demographic characteristics of the animals as well as detailed data on admissions, clinical diagnoses, surgical procedures, case dispositions and hospital utilization. A relational database was programmed in Microsoft Access for Windows 95 Version 7.0.

The percentage of older horses than were presented to TUSVM increased from 2.2% in 1989 to 12.5% in 1998. The majority of the cases were in the 20-29-age category. A smaller number of horses were in the oldest category. There were more geldings than mares. The breed representation was similar to our hospital population with Quarter horses being the most represented followed closely by the Appaloosa, Arab, Morgan and thoroughbred. Most of the animals were horses as opposed to ponies but ponies were over-represented in the older groups of animals.

A full range of clinical diseases was seen in the older horse. Gastrointestinal problems, such as colic and dental problems, were the most common body system affected. This

was followed by musculoskeletal, respiratory, ocular and endocrine problems. Colic was the most common clinical sign, followed by lameness.

Specific diagnoses made most frequently included pituitary dysfunction, strangulating lipoma of the small intestine, laminitis, heaves, large colon impaction, and gastric ulcers. Pituitary dysfunction was significantly more prevalent in horses that were > 30 years of age. Laminitis was significantly associated with the presence of pituitary dysfunction.

Study 2 – Survey of “healthy” older horses

The second study was conducted because the previous hospital population was a select group of animals. They were ill and their owners were willing to financially support a medical workup. This left out the population of horses that had no medical problems that required hospitalization. This second study consisted of a survey sent out to horse owners with horses >20 years of age. Surveys were also sent to owners of younger horses so that a comparison between young and old could be done.

300 surveys were distributed to owners of older horses (≥ 20 years of age) and younger horses (< 20 years of age). 165 geriatric completed surveys were returned. These were compared with 53 younger horse surveys. 62% of the surveys were from Massachusetts, 11% from Connecticut, 8% from NH, 10% from Rhode Island and 9% other. The age ranged from 20 – 44 years old. The younger group ranged in age from 2 – 19. The largest age group of horses fell in the 20-29 years old group. There were more geldings than mares. A similar breed distribution as the hospital population was seen. Pony breeds were statistically over-represented in the older group of animals.

Geriatric horses were more likely to have a history of colic, lameness, dental disease, tumors and pituitary disease than younger horses. They were not more likely to have laminitis, diarrhea, allergies, respiratory tract disease, thyroid disease or fractures.

Owners were asked questions concerning their horses body condition, nutrition, type of work (past and present), preventive medicine and aging perceptions. Most horse owners reported that their animals were in either good or fat body condition. Over 50% of the people fed their horses a senior feed. A high percent of owners reported that they were on a regular deworming schedule of every 8 weeks or less. The majority had their horses teeth floated at least once a year. Dentistry was done equally by their veterinarians and a dental technician. A third of the horses did not shed the winter coats out properly. A number of horses were still working into their late 20's.

Owners of the old horses said that they started to see the signs of aging in their horses around the age of 23. It was felt that age would be a negative factor in the purchase of a horse at the age of 16.5.

Over the past decade, there has been a general feeling at TUSVM that an increasing number of geriatric horses were being seen in the clinic. The data from the first study

confirms that suspicion, revealing an almost 6 fold increase in the geriatric caseload. Increasing hospital presentations may parallel an increase in this segment of the overall equine population. It is also possible that owners are exhibiting an increasing tendency to seek more sophisticated veterinary services for their animals. Older horses often fall into a companion animal-like role once their athletic usefulness ends, and these animals are cherished for their intrinsic value rather than their ability to perform. Health care decisions are then more likely to be made on an emotional rather than purely financial or utilitarian level.

Though the second study could not answer the question of whether the older population of horses is growing in general, it did suggest that a number of horses were still healthy and active even into their 30's. This study will continue to collect data on the older horses and on a younger cohort for comparison purposes.

Recommended Reading

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