Age Is Not a Disease

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Everyone has probably heard that age is not a disease. Just because a dog or a cat has reached a certain age, veterinarians should not make generalizations or decisions based solely on that number. A complete evaluation of the patient, with a thorough history, extensive physical examination, and comprehensive diagnostic testing, reveals much more about the patient and the conditions or the diseases it might actually have.

So, what is age? Chronological age is the number of years since an individual’s birth. It seems simple, and it can be easy to categorize an individual based on that number. But it is not so simple when working with companion animals, especially dogs. In addition to a pet’s chronological age, the practitioner must also consider the concept of relative age.

Accepting the Inevitable
Although age might not be a disease, the process of aging is inevitable. William Fortney, DVM, wrote: “Aging is the sum of the deleterious effects of time upon the cellular function, microanatomy, and physiology of each body system,” including the immune system. A multitude of influences and stimuli affect progressive regression and physiologic decline. The rate of decline and the loss of reserve function of organ systems can be highly variable among species, breeds, physical size, individuals, and organ systems. This decline in function means an individual can have an altered response to everything from medications to stress and infections. At some critical stage, the physiologic tipping point for that organ is reached, at which

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Although aging is a highly variable process, there is still benefit in making broad generalizations when developing care guidelines for patients. Categorizing dogs and cats into age-related tiers or groups allows a basis for initiating discussions about providing optimal wellness care before appreciable changes or signs appear. Expectancy has been met. Mature adult status refers to the years from midlife to the 75% mark, and geriatric designation applies to individuals that outlive their life expectancy. If a patient’s life expectancy is known, calculating these age categories is fairly simple, but no one can truly predict the future. That is why charts comparing human age to pet age based on animal weight can be helpful to at least approximate the relative age of an individual. It is this relative age that can provide the best basis for determining senior or geriatric status, yet there are few practice management systems that make the age-weight conversion for this determination. Clinicians usually have to do it on an individual basis each time a patient is presented for care. In the future, when relative age becomes an easily recorded data point, veterinarians will be able to target client education and senior wellness programs to the best population demographics possible. Today, practitioners who base their senior wellness program on 7 years of age being “senior” will miss those large and giant dogs that have either progressed significantly in senescence or already succumbed to disease.

The Best Approach
Whereas age might not be a disease in itself, it is critical to identify and address those changes in the body affected by the progressive decline of aging. The best approach is lifelong care with an emphasis on wellness and early detection, starting with compiling information on the patient’s status during the healthy mature years and following that patient as functions start to decline and reserves are lost. By paying attention to these parameters and responding proactively whenever possible, we not only optimize the lifespan of these patients but maximize their health span as well.

One Year Does Not Equal Seven
These discussions start with the actual, or chronological, age of the patient. The rate of aging varies dramatically in different sizes of dog breeds and within a breed itself, not to mention individual variation. The well-known 1 year equals 7 dog years generalization may serve as a starting point, but determining the relative (or biological) age of pets is not that simple. In contrast to the differences in longevity between large and small species (e.g., elephant vs mouse), most veterinary professionals are well aware that small-breed dogs tend to have longer life-spans than large-breed dogs. Within a breed itself, however, larger individuals appear to be longer lived than their smaller counterparts.

For cats and small dogs (<20 lb), the first 2 years of life may be considered as equivalent to 24 human years (sexual maturity plus), with 4 human years added to each subsequent year. The same does not apply to large and giant breeds. The AAHA Life Stages Guidelines recommend using the estimated longevity of an individual (often based on breed or weight) and setting the transition into the senior category when 75% of that life expectancy has been met. Mature adult status refers to the years from midlife to the 75% mark, and geriatric designation applies to individuals that outlive their life expectancy.

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See Aids & Resources, back page, for references & suggested reading.