

NEW DATA: Prevalence of Microalbuminuria in Cats

SUMMARY:

- ▲ 1243 cats visiting 59 clinics were tested for microalbuminuria in their urine. Veterinarians reported the health status of each cat prior to microalbuminuria testing at a centralized laboratory.
- ▲ 24.5% of cats tested positive for microalbuminuria with the E.R.D.-HealthScreen™ Feline Urine Test. A statistically significant correlation ($P < 0.0001$) was found between increasing age and a microalbuminuria positive test result.
- ▲ Of the 611 apparently healthy cats, 13.7% tested positive, while 42.9% of the 345 cats with known pre-existing medical conditions tested positive.
- ▲ Observed prevalence of microalbuminuria in apparently healthy cats and increased prevalence of microalbuminuria in cats with medical conditions support routine testing to assess the current health status of the patient and to alert the veterinarian to identify and treat potential causes of renal damage.

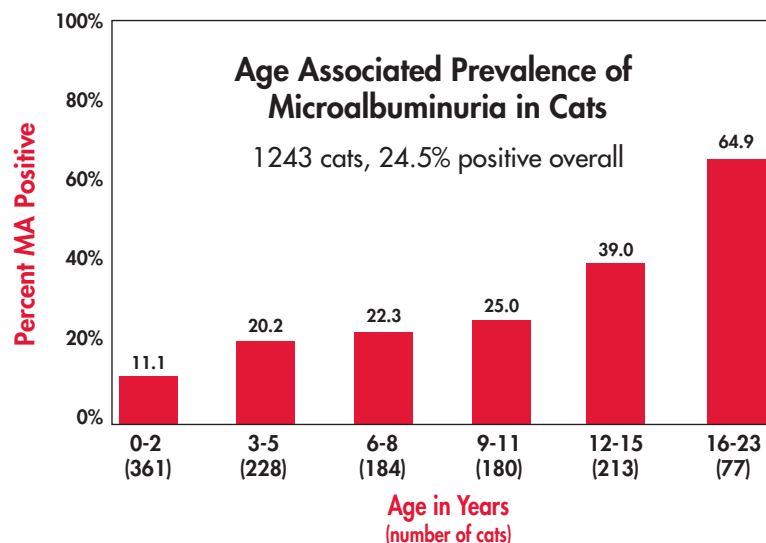
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A study was conducted to assess the prevalence of microalbuminuria (MA) in the general feline population, and to evaluate the relationships between age, health status, and results of the E.R.D.-HealthScreen™ Feline Urine Test. Urine samples from 1243 client-owned and veterinary clinic staff-owned cats were collected by 59 clinics in 22 states. Information requested from the submitting veterinarian included age, gender, breed, urine collection method, reason for visit (well pet, neuter, dental, or medical visit), and medical history.

The average age of the population tested was 7.0 years, with the range being less than 1 through 23 years. All urine samples were analyzed using Heska's E.R.D.-HealthScreen Feline Urine Test. Of the 1243 samples submitted, a total of 24.5% tested positive on the E.R.D.-HealthScreen test. For statistical analysis, ages were rounded up to full years and cats were pooled into age groups of less than 3 years, 3 - 5, 6 - 8, 9 - 11, 12 - 15, and 16 - 23 years. The relationship between age and test results was evaluated using logistic regression analysis. A statistically significant correlation ($P < 0.0001$) was identified between increasing age and positive results on the E.R.D.-HealthScreen test. The relationship is a

logarithmic function with both prevalence and incidence increasing with age. The prevalence of MA in different age groups (Figure 1) was as follows: 11.1% of cats <3 years tested positive, 20.2% of cats 3 - 5 tested positive, 22.3% of cats 6 - 8 tested positive, 25.0% of cats 9 - 11 tested positive, 39.0% of cats 12 - 15 tested positive, and 64.9% of cats 16 - 23 tested positive. The rapid increase in prevalence in older cats is analogous to other geriatric conditions in which incidence of disease increases with age.

Figure 1



Of the 1243 cats, 611 were characterized as visiting the veterinarian for a spay, neuter, or well pet check, and no medical history was listed. The average age of this population subset was 4.8 years. Of these 611 samples from apparently healthy cats, 13.7% had a positive result on the

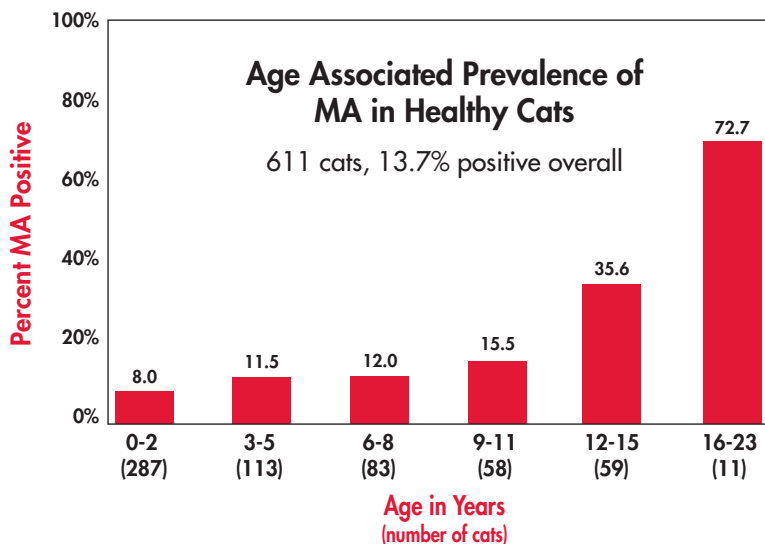


E.R.D.-HealthScreen test. The prevalence of MA in different age groups (Figure 2) was as follows: 8.0% of cats <3 years tested positive, 11.5% of cats 3 - 5 tested positive, 12.0% of cats 6 - 8 tested positive, 15.5% of cats 9 - 11 tested positive, 35.6% of cats 12 - 15 tested positive, and 72.7% of cats 16 - 23 tested positive. A statistically significant correlation (P <0.0001) was identified between increasing age and positive test results in apparently healthy cats.

Of the 1243 cats, 345 were characterized as visiting the veterinarian for a medical reason (excluding elective procedures such as dental prophylaxis, spay, neuter, declaw) and a specific medical history was listed. Medical conditions consisted of those seen routinely by practicing veterinarians, such as dental disease, FLUTD, IBD, diabetes, hyperthyroidism, vomiting, upper respiratory infections, renal disease, and neoplasia. The average age of this population subset was 9.5 years. Of these 345 samples from cats with medical conditions, 42.9% had a positive result on the E.R.D.-HealthScreen test. The prevalence of MA in different age groups (Figure 3) was as follows: 29.0% of cats <3 years tested positive, 43.8% of cats 3 - 5 tested positive, 47.1% of cats 6 - 8 tested positive, 34.3% of cats 9 - 11 tested positive, 39.5% of cats 12 - 15 tested positive, and 65.2% of cats 16 - 23 tested positive.

The observed prevalence of MA in apparently healthy cats of all ages supports routine testing to help alert the veterinarian to underlying medical conditions that are causing renal damage. In cats with known medical conditions that have a positive result on the E.R.D.-HealthScreen test, repeat testing can be used to monitor improvement in kidney health following appropriate medical treatment. **Heska has developed a 3-step guide to assist veterinarians when a positive result is obtained.** The suggested steps include 1) check for underlying disease conditions that could be

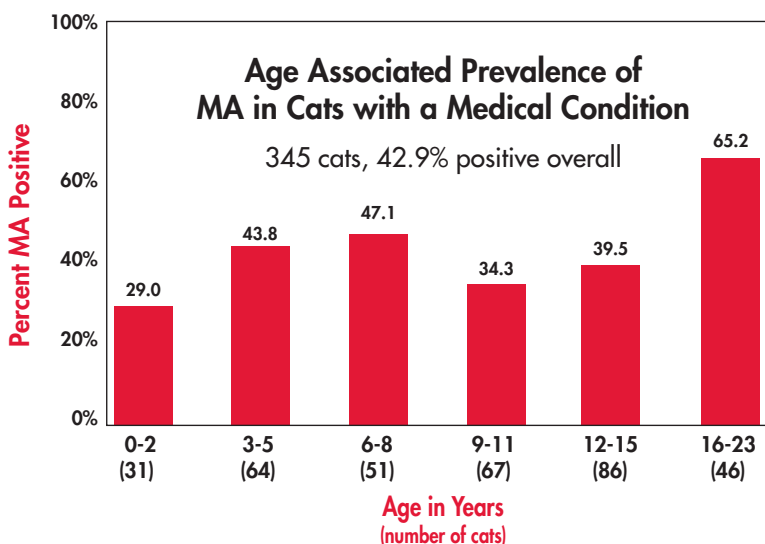
Figure 2



causing MA; 2) repeat testing to determine if the MA is stable, increasing, or decreasing; and 3) follow recommendations for management of the microalbuminuric patient. Cats with medical conditions that have a negative result on the E.R.D.-HealthScreen test can also be repeat tested to monitor ongoing kidney health.

Detecting, monitoring, and treating diseases that cause renal damage is now possible earlier than ever before, enabling veterinarians to enhance the capability of their routine health exams and improve their ability to help pets live longer and healthier lives.

Figure 3



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Copies of these studies are available at www.heska.com/erdscreen.