Top 5 ailments in cats

Introduction

The inspiration for this article came from the Banfield Pet Hospital's State of Pet Health 2011 Report, Volume 1— the first of its kind to capture and analyze the medical data from 2.1 million dogs and nearly 450,000 cats in USA. As the largest general veterinary practice in the world, operating 770 hospitals in 43 states and employing more than 13,000 associates—including 2,400 licensed veterinarians—Banfield Pet Hospital has a unique understanding of the health of companion animals.

MSD Animal Health shares this extensive commitment to innovation and as a company, would like to share our resources to help pet owners throughout South Africa get a better understanding of the potential challenges that they may be facing when taking on the responsibility of a pet cat.

Pets are family and I would like to share my caring and compassion for cats in an effort to partner with our clients and pet owners in South Africa, to ensure pets stay part of the family by providing outstanding preventive care. We want to use our unique knowledge and research to help pet owners better care for their pets and raise awareness of serious health issues affecting pets. The prevalence of diseases is constantly changing and the aim of this article will be to discuss five key diseases which are seen in veterinary clinics across South Africa and are affecting the health of our pet population.

MSD Animal Health offers veterinarians, farmers, pet owners and governments the widest range of veterinary pharmaceuticals, vaccines and health management solutions and services. MSD Animal Health is dedicated to preserving and improving the health, well-being and performance of animals. The company will conduct its business according to the highest standards of quality, professionalism and integrity. Most importantly, we believe that early diagnosis of disease will positively impact a pet's health and lifespan. The author believes that the information provided in this article will be useful to pet owners as we partner to help pets live longer, healthier lives.

Dental Disease

Dental disease is the most common disease in cats, affecting 78 percent of dogs over the age of 3 in the USA, and although there is no official work done in South Africa to render a comparative figure, the author's experience from private practice would tend to agree that South Africans would most likely have a very similar prevalence of dental disease. I am the proud owner of two cats myself and one of my two cats has a chronic immune-mediated dental condition.

Dental disease includes any health issue affecting the mouth, including inflammation, tartar, gingivitis and periodontal (affecting the structures and tissues around the tooth) disease, among other issues. Periodontal disease is classified by the severity of its impact on teeth and gums: It is divided into four stages, ranging from mild tartar and gingivitis (inflammation of the gums), to gingival recession and degradation of the periodontal ligament, to significant inflammation and loss of teeth. Periodontal disease, when severe, can lead to bacterial infections that spread through the bloodstream to other organs, including the heart, kidneys and liver, causing chronic disease and even organ failure.

Risk factors for developing dental disease in cats include increasing age, primarily moist diet and underlying immune mediated disease. Although increasing age is a risk factor for the development of dental disease, it can occur at any age. Prevention early in life will help to reduce the frequency and severity of dental disease later in life. Professional cleanings are vital because they include measures pet owners can't take at home. These measures include a thorough examination of a pet's teeth and gums, dental radiographs may be done to evaluate the entire tooth and check for bone loss or abscesses, and the use of special tools to remove tartar from the teeth below the gum line.

Preventive recommendation:

- Regular dental examinations by a veterinarian and annual professional dental cleanings, especially for cats over the age of 2.
- At-home preventive care including twice-a-week brushing (yes, it can be done in cats too!).
- Dental chews, water additives and specially formed dry pet food may also be used to help prevent tartar build-up.

Flea Infestations

<u>Fleas</u> are common external parasites of mammals across the globe, and the prevalence of fleas is highest of all the external parasites. Fleas (as well as ticks) are important external parasites to prevent; their bite causes a great deal of irritation, and they can transmit disease to both animals and humans.

Flea allergy dermatits is one of the most common skin conditions in cats. As fleas bite to eat, they inject saliva under the skin causing an irritation that can lead to scratching, hair loss and infections. In addition to the irritation caused by the bite, fleas can also transmit tapeworms and spread certain infectious diseases. Large numbers of fleas can even consume so much blood that a kitten can die as a result of blood loss (flea anaemia).

Prevention recommendation:

- Many suitable products are available for the prevention and treatment of fleas. These are available in the form of shampoos, rinses, sprays, mists/fogs, tablets and spot-on treatments. Before selecting a product, pet owners should work directly with a veterinarian to ensure the selected product is appropriate for their pet's lifestyle.
- Pet owners should only use flea products that have been registered and approved for use by the South African Medicines Control Council and other authorities.
- Prevention of flea infestation involves environmental management and application of approved products to animals or the environment.
- When returning from outdoor activities, a pet's skin and coat should be inspected in order to identify newly acquired fleas. The use of a flea comb will often help pick up non-visible parasites hiding closer to the skin.
- Some ingredients in flea preventives are not safe for use in cats e.g. permethrin and amitraz. Pet owners with both dogs and cats in the home should discuss proper preventive medications with their veterinarian to eliminate any health risks to cats.
- Fleas live in areas frequented by animals and humans and seek out dark, warm, humid places—usually carpets, bedding, under furniture or in garden debris.

Internal Parasites

Internal parasites are important diagnoses as they can cause significant discomfort to pets as well as pose a zoonotic disease risk (they can be transmitted from animals to humans). Some of the most common internal parasites carry a zoonotic risk.

Roundworms and hookworms are zoonotic parasites that inhabit the intestinal tract of cats. While most common in kittens, infection can occur in cats of all ages. The mouthparts of hookworms attach to the pet's small intestine allowing them to feed on the pet's blood. Roundworms and hookworms can cause mild to extreme illness in pets and even death in some cases.

Most pets infected with roundworms and hookworms show no signs of infection. Some pets, especially young animals, become noticeably ill from roundworms and hookworms. Clinical signs most commonly observed in pets severely infected with roundworms and hookworms include: vomiting, severe weight loss, loss of appetite, swollen stomach, severe anaemia and even death.

<u>Tapeworms</u> are long, flat, segmented parasites that live in the small intestines of dogs, cats, domestic animals and wildlife. Tapeworms do not have a mouth; instead, they attach to the inside of the intestine with suckers. Some also have hooks to aid attachment. Pets infected with tapeworms may not show any clinical symptoms; pet owners usually notice tapeworm segments around

the anal area or on the surface of the stool. The segments may move or appear as grains of rice caught in the hair around the rectum. They may also be found in places where infected pets rest and sleep.

<u>Whipworms</u> are more commonly found in the intestines of canines. Cats may also become infected with whipworms, but it is more common in dogs. Adult whipworms are shaped very thin at the front and become wider toward the rear. As with roundworms and hookworms, many pets infected with whipworms will initially show no sign of infection. However, whipworms can cause mild to extreme illness in pets and in some cases lead to death.

Whipworm infection can lead to bloody diarrhoea, severe weight loss, dehydration and severe anaemia. Whipworms can cause disease in humans, however, there is no evidence they are transmitted from animals to humans.

Who in the family is at risk? All human family members are potentially at risk from zoonotic parasites. The presence of kittens in a household increases this risk due to their soiling habits. Children run a higher risk of contracting a parasite due to their play habits, attraction to pets and pica (eating dirt). In addition to regular deworming of pets, proper hygiene is one of the best ways to reduce the risk of zoonotic diseases.

Preventive recommendation:

- Deworming medication, administered by a veterinary professional, is the recommended way to prevent internal parasites. The recommended frequency of deworming varies depending on the life stage and individual environment of the pet.
- Clean up after pets to remove potentially infective eggs from the environment before they spread.
- Children should be discouraged from eating soil. Sand boxes should be covered when not in use and potentially contaminated areas avoided.
- Practice good hygiene in order to reduce the risk of zoonotic transmission.
- The treatment, control and prevention of internal parasites and the diseases they cause needs to remain at the forefront of veterinary medicine, especially given their zoonotic potential.

Obesity in Cats

Obesity is a nutritional disease which is defined by an excess of body fat. Cats that are over nourished, lack the ability to exercise, or that have a tendency to retain weight are the most at risk for becoming obese. Obesity can result in serious adverse health effects, such as reducing the lifespan, even if your cat is only moderately obese. Multiple areas of the body are affected by excess body fat, including the bones and joints, the digestive organs, and the organs responsible for breathing capacity.

Obesity is common in cats of all ages, but it usually occurs in middle-aged cats, and generally in those that are between the ages of 5 and 10. Neutered and indoor cats also tend to have a higher risk of becoming obese.

Symptoms of obesity include weight gain, excess body fat, the inability (or unwillingness) to exercise and an above-ideal score in a body condition assessment.

There are several causes of obesity, but is most commonly caused by an imbalance between the energy intake and its usage -- eating more than the cat can possibly expend. Obesity also becomes more common in old age because of the normal decrease in a cat's ability to exercise. Unhealthy eating habits, such as high-calorie foods, an alternating diet, and frequent treats can also bring on this condition.

Obesity is diagnosed primarily by measuring the cat's body weight or by scoring its body condition, which involves assessing its body composition. Your veterinarian will do this by examining your cat, palpating its ribs, lumbar area, tail, and head. The results are then compared to the breed standard. If a cat is obese, it will have an excess body weight of approximately 10 to 15 percent.

Preventive recommendation:

- Reduced caloric intake and increasing your cat's time spent exercising. Your veterinarian will most likely have a prepared diet plan that you can use to refigure your cat's eating schedule, or will help you to create a long-term diet plan for your cat.
- If your animal is predisposed to weight gain, diets that are rich in dietary protein and fibre, but low in fat, are typically recommended, since dietary protein stimulates metabolism and energy expenditure, along with giving the feeling of fullness, so that your cat will not feel hungry again shortly after eating. Dietary fibre, on the other hand, contains little energy but stimulates intestinal metabolism and energy use at the same time.
- Physical activity: the most common suggestions for cats climbing and scratching posts and playing games with toys that they can chase, wrestle or jump for.
- Monthly monitoring of your cat's weight and establishing a life-time weight maintenance program to maintain your cat's ideal body condition score. With a firm commitment to your cat's health and weight, you will feel confident that your cat is eating healthy and feeling its best.

Cystitis

"Cyst" is Greek for pouch or bladder and "itis" means inflammation which collectively gives us "cyst-itis". Cystitis is defined as inflammation and/or infection of the bladder. It may precede or be secondary to urolithiasis (stones in the urinary tract). It can be acute (sudden onset) or chronic (long lasting).

There are several possible causes including Feline Idiopathic Cystitis (FIC) – "idiopathic" means there is no known cause (more commonly seen in cats under 10 years of age), bacterial infection - more common in senior cats over 10 years of age, and lastly, urinary crystals and stones (urolithiasis). Cats are more prone to developing cystitis than dogs, and it is seen more frequently in females than males. This is due to their shorter urethra which makes it easier for bacteria to ascend from the perineum into the bladder.

Diabetic cats are at greater risk of developing cystitis as higher levels of glucose (sugar) and protein in the urine promote bacterial growth. Decreased white blood cell activity (suppressed immune system) may also play a role. Long-term use of steroids can also lead to cystitis due to induced lowered immunity (artificial immunosuppression).

Infrequent urination is another cause of cystitis. Cats may delay urination if they are stressed, avoid urinating due to poor weather (and reluctance to go outdoors) or have a dirty litter trays, trays located in inappropriate areas. Holding onto the urine can cause it to stagnate, which can help promote the growth of bacteria.

Senior cats often drink less water than they should, which also leads to concentrated urine, making a perfect environment for bacterial growth.

The symptoms of cystitis are straining to urinate, only letting out a few drops (if any) at a time often misinterpreted by the owner as constipation. You may notice your cat frequently visiting the litter tray. Haematuria (blood in urine) is another potential clinical sign. Excessive genital licking may be indicative of cystitis as well. Sudden halt in litter box usage or crying in the litter box. You may hear your cat crying near, around or in the litter box. This also involves the cat attempting to urinate and little or no urine is passed. Urinating in places other than the litter box, perhaps due to secondary incontinence may be witnessed, such as the bath or floor.

Smelly urine is sometimes noted by pet owners. It is extremely important to note that difficulty urinating is a medical emergency and you should take your cat to the veterinarian immediately. Failure to act guickly can result in death.

Your veterinarian will be able to give a tentative diagnosis based on physical examination and signs, such as straining to go to the toilet, licking genitals. He will feel the bladder through the abdomen, the bladder may feel large, full and distended or it may feel small and thickened. Further investigation is often indicated and may include the following tests: urine analysis, abdominal ultrasound examination, bacterial culture of a urine sample (this enables your veterinarian to determine the best type of antibiotic to treat the infection).

Treatment depends on the cause and severity of the condition. Finding and treating the underlying cause. Crystal/bladder stone build up is caused by urine which is too concentrated (and alkaline) and it is important to try and get more fluids into your cat, to reduce the concentration of the urine. It is also beneficial to aim for a pH below 6.5. pH in a cat's urine usually ranges from 5.5 to 8.0, but diets which result in < 6.5 decrease the chances of struvite crystals forming.

Diet: Moisten dry food or change to canned/raw food. Dry food contains approximately 10% water, whereas canned or raw food contains approximately 70% water. Cystitis has been shown to recur less often in cats fed a canned diet. Feed a diet which decreases the likelihood of forming crystals. There are special diets (prescription diets) which are created to prevent bladder stones from forming. Increase water consumption: Encourage drinking by other means, such as providing a drinking fountain for your cat.

Antibiotics (if the cause is determined to be bacterial, will be prescribed), sometimes antidepressants and analgesics (pain killers) are two examples of medications which may help a cat with cystitis. Corticosteroids may be prescribed for FIC to reduce inflammation. Severe cases will need to be treated on an in-patient basis (hospitalized) and may include artificial urine extraction to reduce the pressure in the bladder and/or catheterization (usually under general anaesthesia). Fluid Therapy - this helps re-hydrate the affected cat and also helps flush out the crystals that have formed, as well as the excess potassium. Surgery is sometimes indicated in male cats that experience repeated bouts of cystitis or cats where their bladder was not fully flushed during the catheterisation process.

Preventive recommendation:

- Keeping stress to a minimum. This includes providing your cat with a well-defined schedule, cats don't like change. Don't
 change types of cat litter suddenly.
- Make sure there are enough litter trays in your home. A rule of thumb is one tray per cat, plus one extra. So if you have two
 cats, you should have three trays. If your cat goes to the toilet outside, he should still be provided with a litter tray indoors also,
 so that he can go to the toilet during periods of inclement weather.
- Providing plenty of clean, fresh drinking water. This should be changed daily.