A REPORT ON

DISEASES OF CAT FOUND IN SAQTVH



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Diseases of cat found in SAQTVH, CVASU ABSTRACT

The information collected from SAQTVH during my internship placement from 13 september, 2019 to 17 september, 2019. The clinical history was taken from the owner of the cat through the teacher. There were only 12 cats I found in my 5 days placement. The climate was very hot in summer (average temp 37^oc), that's why dehydration in cats was a common problems (41.66%). Then the feline panleukopenia virus affected cats percentage were more (25%). Fracture due to accident and frost bite due to keeping the cat in AC was 8.33% respectively. Female cats are more susceptible (66.66%) than male cats (33.33%). During winter season cats are inside the room in most of the time and they are less affected by contagious diseases. In winter and summer the affected percentage was 16.66% and 83.33% respectively. Specialist says if cats are properly vaccinated almost 60% of that cases can be avoided.

Key words: Dehydration, Feline panleukopenia, Fracture, Frostbite

CHAPTER I INTRODUCTION

Domestication of cat

Cats have been domesticated since prehistoric times, perhaps for 5,000 years or more; (Forsyth et al) there is evidence (from a Neolithic grave on Cyprus) of some sort of association with humans dating back to the 8th cent. B.C. (Caughley *et al*). Cats have been greatly valued as destroyers of vermin, as well as for their ornamental qualities (Foran et al)The ancient Egyptian domestic cat, which spread to Europe in historic times, was used as a retriever in hunting as well as for catching rats and mice(Fleming et al). Parkes et al reported, it was probably derived from Felis lybica or one of the other North African wildcats. The modern domestic cat, F. catus, is probably descended from this animal, perhaps with an admixture of other wildcat species, cat also been the object of superstitious fear, especially in the Middle Ages, when they were tortured and burned as witches (Leib, MA et al). Cats vary considerably in size; males commonly weigh 9 to 14 lb (4.1–6.4 kg) and females 6 to 10 lb (2.2–4.5 kg). They have coats of varying length and a wide variety of colors: black, white, and many shades of red, yellow, brown, and gray. A cat may be solid-colored or have patches or shadings of a second color. (Caughley *et al*).

Common cat diseases:

There are many diseases, which are common to cats. If ignored some of those diseases may turn out to be fatal. But most of the diseases can be prevented by taking care of simple things. Firstly, keep your cat indoors. Secondly, get your cat vaccinated against some common cat diseases. (Trepanier *et al*)

Some of the common cat diseases are:

Upper respiratory infections (URIs):

URIs is similar to the common cold in humans. Symptoms include sneezing, running nose and eyes, reddened eyes, fever and decreased appetite. if left untreated URIs can be fatal .these airborne virus is very fatal . They can be transmitted to cat through handling of man and though contact with other cat and with inanimate objects such as litter boxes, food bowels. (Sherding *et al*)

Prevention is best approach in URIs. Separate any new cat from your other cats for at least three weeks until you are sure that the newcomer doesn't have any symptoms of a URIs. (Grice *et al*)

Rabies:

Rabies is a fatal and one of the more common cat diseases. It is viral illness that is transmitted through bite wounds from infected animal and attacks the nervous system. Prevent rabies through vaccination and by keeping your cat indoors.(Zoran *et al*)

Feline panleukopenia :

Also known as feline distemper, this is a highly contagious viral diseases that can be transmitted through contact with humans ,infected cats ,clothing, hair paws, food bowls and even cat carries. The diseases come suddenly with vomiting, loss of appetite and diarrhea. Prevent this diseases by getting your cat vaccinated against this virus.(Zoran *et al*)

Feline leukemia virus (FeLv)

FeLv is a fatal infectious virus that affects the immune system and can cause several forms of cancer and other associated diseases. (Grice *et al*) It is transmitted

through the saliva, urine and faces of infected cats. Blood tests can diagnose this disease. The cat should be tested before being vaccinated. Prevention is the only cure. Get your cat vaccinated. (Trepanier *et al*)

Feline immune deficiency virus (Flv)

Flv is similar to human acquired immune deficiency syndrome (AIDS) but the diseases causing virus is different. This fatal virus attacks the immune system causing, causing a variety of symptoms (Grice *et al*). General symptoms include chronic non responding infections, respiratory problems, appetite loss, persistent diarrhea and severe oral infections. Flv is passed from cat to cat primarily through bites. There is currently no vaccination or cure for Flv. Just keep your cat inside to prevent it from contacting Fly (Leib *et al*).

Feline infectious peritonitis (FIP):

FIP is deadly virus that is fatal to cats. This virus can take out two forms, commonly referred to as wet (which involve fluid in the abdomen) and dry (which does not). Both forms of FIP may cause fever, lethargy, vomiting, diarrhea and loss of appetite (Trepanier *et al*).

There is no effective treatment for FIP. The best way to prevent this disease is to Keep your cat indoors, away from strange animals and remain up- to-date vaccines. (Trepanier *et al*).

Diarrhea in Cats

The passage of frequent squirts of watery stool is known as Diarrhea and it is a very common feline aliment. It can't be termed as a disease on its own (Henzell *et al*)

Actually, it is a symptomatic disorder of various underlying problems in the body. Dimski *et al* reported, sometimes diarrhea may be acute, lasting for a period of 2-3 weeks. Sometimes, the situation gets chronic when it persists for more than 3 weeks. Blood may or may not be present in the stool, and often the stool is yellowish and frothy. Various factors contribute towards such unhealthy bowel movement in cats. Let us understand the various symptoms, causes, preventive measures and useful home remedies for treating the problem of diarrhea in cats. (Auld *et al*)

Symptoms

- Liquid Stool
- Sudden loss of appetite
- Lethargy or Inactivity
- Restlessness or Irritation
- Frequent thirst (due to loss of body fluids)

Causes

- Sudden dietary changes
- Dietary indiscretion and food allergies
- Bacterial infections (like Salmonella and Campylobacter)
- Viral infections (like FIV, FeLV, Panleukopenia, Roatvirus)
- Protozoal Infections (like Giardia and Cryptosporidium)
- Parasitic worms (like whipworms and roundworms)
- Internal blockage (due to hairballs or other foreign matters)
- Neoplasia (like Lymphoma and Carcinoma)
- Hormonal problems (like Hyperthyroidism)
- Inflammatory bowel disease
- Ingestion of toxic substances
- Liver and kidney malfunctions

Preventive Measures

- Choose a good brand of commercial food and stick to it. Do not go for substandard packaged or canned food for your cat.
- Do not make any abrupt changes in his diet plan. While introducing a new food; begin by adding it in small quantities to the normal food.
- Do not provide food like chocolates, raw fish, raw eggs, onions, bones and pork. They are extremely harmful for cats.
- Always provide food in a clean and sterilized food bowl. See that you properly clean the bowl after every meal.

Also, ensure that the toxic substances or other harmful products in your home are safely stacked away, out of kitty's reach (Trepanier *et al*).

Blood in Cat Stool

The presence of bright or fresh traces of blood in the stool is clinically termed as "Hematochezia"

Sherding *et al* reported that, such a medical condition is very common in pets, especially cats and dogs. However, it should not be confused with 'Melena', which is generally the excretion of tarry and dark stool. Passage of blood may sometimes indicate minor disorders in the body of your cat. But, in certain conditions, Hematochezia may indicate serious problems like cancer or other terminal diseases. Repeated bloody bowel movement in your pet should never be overlooked. (Marks *et al*)

Symptoms

- Presence of blood particles in stool
- Increased bowel movement
- Exerting while defecating
- Inactivity and lethargy

- Sudden loss of appetite
- Excessive intake of water
- Diuresis or excessive urinating
- Sudden weight loss
- Frequent vomiting

Causes

- Bacterial infections like Clostridia, E Coli, and Salmonella
- Ingestion of toxic substances like rat poison or house cleaning agents.
- Intestinal parasites like tapeworms, hookworms and roundworms.
- Consumption of unhealthy or allergic food those are unsuitable for cats.
- Presence of benign tumors in the rectum or colon.
- Invagination of one part of the bowel into another.
- 'Coagulopathy' or clotting disorder in the body.
- Intake of certain allergic drugs and antibiotics.
- Cancer of the lower bowel (neoplasia).
- Inflammation of the bowel or 'Colitis'.

Remedies

- Avoid giving commercial and canned cat food to the animal.
- Refrain from feeding him table scraps or fatty foods.
- Give medications for 'deworming', in case of parasitic infections.
- Providing antibiotics with anti-inflammatory and antibacterial properties.

Ringworm in cat

Ringworm in cats is a fungal infection that feeds on keratin. Keratin is mainly found in hair, skin and nails. Medically known as Dermatophytosis or Dermatomycosis, the ringworm infection affects the superficial dead layers of the skin and hair. The fungus thrives on the dead tissues in the skin and multiplies with time. The fungus attacks and damages the hair shafts, leading to round patches of hair loss. The ringworm infection usually affects cats of less than 12 months of age, malnourished cats, cats with a weakened immune system and those suffering from diseases. The infection is highly contagious and can easily spread to other animals and humans through direct contact. It can also be transmitted indirectly through bedding, brushes and grooming equipment used on an infected animal. (Marks *et al*)

Symptoms of Ringworm in Cats

- The best way to identify the signs of ringworm in cats is to check their skin lesions. A cat so infected exhibits circular patches of hair loss around the head, ears and tail. The infection later on spreads to other body parts as well, such as the face, nose, chin, lips and limbs.
- Initially, the patches are in small dots. With time, they grow bigger and change in shape and size takes place.
- The feline may experience redness, irritation and itching around the area of infection.
- The cat's skin becomes dry and flaky and gradually, the claws and claw beds to get infected with the ringworm.
- A ringworm affected cat suffers from hair loss too, though the degree of shedding varies from mild to severe, depending upon the individual.
- When neglected, the fungus can infect the nails or nail beds also. This can be seen from the distorted and damaged nails.
- The cat is likely to scratch more frequently, especially around the area surrounding the ears.

Treatment of Ringworm in Cats

Shampoos/ Dips

The most effective dips are the lime sulfur dips. However, the dip can yellow the coat of the feline, which would fade only with time. Prevent your cat from licking its coat before it has completely dried, else it can induce vomiting. For longhaired cats, it becomes important to clip the body hair to increase the effects of the treatment and reduce environmental contamination. Bath the cat after every 4 to 6 days for about 2 to 4 weeks. (Sherding *et al*)

Griseofulvin (Fulvicin)

The most commonly used anti-fungal drug is Griseofulvin. (Fleming *et al*)It alters the structure and function of microtubules, thereby strengthening the cat's immune system and helping it to fight the infection. The drug is available in tablet form, which should be given to the cat, 2 times a day, along with the food. However, Griseofulvin should not be given to stud cats, pregnant felines or females that you plan to breed within 2 months of the treatment, as it can lead to birth defects. The side effects of this drug include nausea, fever, lethargy, diarrhea and anemia. In rare cases, it can also lead to bone marrow suppression and liver disease. Also, pregnant women should avoid handling this drug. Other drugs that can be used for treating ringworm are Ketoconazole (Nizoral), Itraconazole . (Fleming *et al*)

Topical Medications

The most effective topical ointments used for treating ringworm in cats are thiabendazole or miconazole (Caughley *et al*). These creams can be applied on the infected parts of the skin. To increase the effectiveness of these creams, it is suggested to clip your cat's hair, depending upon the breed. Other ointments like Novasan, Conofite, Tresaderm and Lotrimin can also be considered for the same.

Eye diseases in cat

Glaucoma

Glaucoma is characterized by an increase in the pressure within the eye, which results in the improper functioning of the eye lens. The intraocular pressure can however be reduced by specific medications during the early stages. In severe cases, surgery is the only available treatment. (Johnson *et al*).

Melanoma

A common feline eye problem, melanoma develops due to the thickening of the iris. A veterinarian can easily notice the same. The color of the infected iris also visibly changes. The disease is generally prevalent among older cats. Normally, the contaminated eye is removed with the help of surgery. (Matz *et al*)

Cataracts

Matz et al reported, in this disease, the eye lens become opaque and leads to optical disorders. If left untreated, cataracts may also lead to glaucoma. The disease is more common in dogs, rather than cats. So, it becomes important to detect and treat the primary causes of cataracts. Surgeries can be performed for lens transplants.

Herpes

This eye disease in cats is attributable to presence of the Herpes virus in the body. The virus is found in the optic nerve, trigeminal ganglia, and tonsils and even in the nasal terminates of cats. One of the easiest ways of preventing the disease is providing your cat with a Herpes vaccination. (Johnson *et al*)

Progressive Retinal Atrophy (PRA)

This is an inherited eye disorder in cats and is incurable. A cat with PRA suffers from a slow decrease in eyesight and eventually becomes blind. Due to the gradual

and painless nature of the disease, an infected cat in such cases easily adapts to his reduced vision and blindness. (J. Parkes *et al*)

Conjunctivitis

Conjunctivitis occurs when the eye membrane gets inflamed and reddened, often due to the presence of Herpes Virus. Treatments in such cases are very complicated and there might be recurrent surfacing of the disease. Various freeliving organisms may also carry the disease. (Johnson *et al*)

Sudden Blindness

J Parkes et al reported stress and hypertension also give rise to sudden blindness in cats. Various hormonal disorders, kidney problems and diseases like Diabetes are off-shoots of hypertension in the animal, and leads to this condition. Bloody eye chambers and dilated pupils are its major symptoms. Some of these cases blindness will be unavoidable (Zoran *et al*).

CHAPTER II METHODOLOGY

2.1 Study area

The study area was SAQTVH, CVASU. There were 03 units for small animal. Everyday large amounts of small animals were taken in the hospital for treatment and general checkup.

2.2 Study period

The study was carried out at SAQTVH, CVASU during internship placement period that was 05 days from 13.09.2019 to 17.09.2019.

2.3 Data collection

The necessary information for the diagnosis of diseases was collected directly from the owner of the animal through questionnaire. The questionnaire includes following information such as:-age, sex, body weight, breed color species, patient data (duration of illness, history of previous treatment, body condition) farmers complain and management system (feeding, housing, hygiene measure etc.) the skin disease was diagnosed by physical examination, laboratory and clinical findings for the disease condition.

2.4 Diagnosis

2.4.1 Physical examination:

The animals were examined individually by taking history, close inspection, taking temperature, palpation parting of hair coat and itch reflex. The signs, number location and physical characteristics of characteristic lesion size shape texture color location were recorded.

2.4.2 Laboratory examination

For hematological test 2-3 ml blood collected from cephalic vein and placed half of the blood in a vial with anticoagulant and other part in vial without anticoagulant for serum test. Vials are labeled with the no. of the patient and send to the centralized clinical laboratory.

For diagnosis of the skin disease, skin scraping taken from the affected part and send to the Dermatological unit. Diagnosis of the skin disease was made on the basis of interpretation of epidemiological feature, history, findings of clinical examination of the animal and laboratory examination of the specimen like recovery of mite from skin scrapings digested with 10% KOH solution and examined under microscope.

Procedure:

At first skin scraping was taken from the suspected case Then placed on a microscope slide 1 drop of 10% KOH was added Specimen was allowed to stain for few minutes with gentle warming Microscopic examination was revealed hyphae and spores (*Trichophyton spp*) the infected materials

CHAPTER III RESULT AND DISCUSSION

Feline panleukopenia

It is also called feline distemper, infectious enteritis, and cat fever plague. It is contagious, fatal generalized disease of young cats, caused by *Feline panleukopenia virus* (FPV) of the genus *Parvovirus* under the family *Parvoviridae*.

Clinical findings:

- Per acute cases- death within 24 hours and acute cases- the course of the disease is 5-7 days.
- Rise of temperature that persist 24 hour and diphasic fever.
- Vomiting, dehydration, diarrhea was persisting for 2-4 days.

Diagnosis

Tentative diagnosis was done with compatible history and suggestive clinical signs.

Fracture of bone:

Fracture of tibia bone.

Clinical findings

Unable to stand

Severe pain was in the affected area.

Diagnosis:

- Accidental history was present.
- Pain: pain was over the site of fracture.
- Dysfunction: lameness and unable to stand.
- Local trauma: the area of fracture was swollen.
- Abnormal posture:



Correction of Fracture

- Crepitus: bony crepitus was the gritting sensation transmitted to the palpating finger by the contact of broken bone ends on each other.
- Radiographic sign:
 - ➤ A break was in the continuity of bone.
 - ➤ A line of radiolucency was present when fragments are discarded.

Treatment:

Immobilization by using plaster of paris. (4 week)

Dehydration:

Dehydration may occur due to diarrhea,

viral diseases or sudden climatic changes.

Clinical history:

- Sudden loss of appetite
- Lethargy or Inactivity
- Frequent thirst (due to loss of body fluids)



Fluid Therapy

Treatment: fluid therapy given (normal saline 0.9% NaCl)

Frost bite:

Clinical sign

- Sudden unconsciousness
- Peripheral circulation decrease
- Subnormal temperature
- Extremities were very cold.

Treatment:

Hot therapy was given immediately.



Hot therapy

Ring worm in cat

Clinical sign

- Circular patches of hair loss were present around the head, ears and tail.
- The infection later on was spreading to other body parts as well, such as the face, nose, chin, lips and limbs.
- Initially, the patches are in small dots. With time, they grow bigger and change in shape and size takes place.
- Redness, irritation and itching around the area of infection.
- Skin becomes dry and flaky and gradually, the claws and claw beds to get infected with the ringworm.
- Cat was suffering from hair loss.

Treatment

Griseofulvin ointment was given.

No of cases	Ratio of M and F		Percentage of I	M and F
12	MALE	FEMALE	Male	Female
	4	8	33.33%	66.66%

Table 3.1: Affected cats in male and female percentage.

Table 3.2: Affected cat in disease percentage

Name of the diseases	No. of cases	Percentage (%)
Feline panleukopenia	3	25
Skin diseases	2	16.66
Dehydration	5	41.66
fracture	1	8.33
Frost bite	1	8.33

Cats are mostly suffered from hot temperature. Later they are suffering from feline panliukopenia. Accidental cases like fracture and frost bite also present.



Fig 3.2- Percentage of Diseases of Cat

Table- 3.3: Affected cat in different season

Seasons	Affected number	Percentage
		(%)
Summer	10	83.33
winter	2	16.66



Fig 3.3 Seasonal Variation

CHAPTER IV CONCLUSION

At SAQTVH, CVASU most of the cats are susceptible in dehydration due to the very hot temperature. Next the feline panleukopenia virus affected cats number was more. Cat specialists from SAQTVH, CVASU said if panleukopenia virus are properly vaccinated the number of illness will decrease up to 80%. In summer the cats are mostly affected than in winter, so cats should keep in favorable temperature in summer. The best way to protect the cat from various diseases is proper vaccination in time to time and don't allow stranger cat near your favorite pet.

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