

# **A case Report on Constipation in Persian Cat**



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# A case Report on Constipation in Persian Cat



A clinical report submitted by as per approved style and content

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# Contents

<b>SL. No.</b>	<b>Name of the contents</b>	<b>Page No.</b>
1.	Abstract	04
2.	Introduction	05-06
3.	Methods and Materials	07-10
4.	Results and Discussion	11
5.	Conclusion	12
6.	References	13
7.	Acknowledgement	14
8.	Biography	15

## **Abstract**

The term "constipation" refers to the irregular or absent passage of excrement via the colon and rectum. Cat constipation can have a variety of known causes, and the clinician's ability to identify the correct etiology in each case will determine how the condition is managed. The doctor may have to decide between surgical and therapeutic approaches to such cases. Numerous factors, including the identification of an underlying cause, the colon's ability to operate, and the results of medical treatment, will affect this decision. A two-year-old male Persian cat weighing about 4 kg was presented with a clinical history of weakness, loss of appetite, abdominal pain, decreased to absent defecation, hyporexia, small, dry feces, abdominal straining, hind-limb paresis, vocalization during defecation, vomiting, and lethargy, which were identified during the clinical examination. After confirmation of constipation by an X-ray report, the cat was treated with lactulose, simethicone, and glycerol, followed by an enema with avolac solution. After 7 days of continuous treatment, the cat was completely recovered.

**Key Words:** Constipation, Cat, hyporexia, defecation ,Enema

## Chapter 1

### Introduction

Constipation is characterized as infrequent or absent defecation accompanied by the retention of feces in the colon and rectum (Yam, P., 1997). Abnormal colonic motility is the cause of primary constipation. Neuromuscular dysfunction may occur in animals with lumbosacral disease or in cats with idiopathic megacolon (Matthiesen et al., 1991) dehydration, hypokalemia, and hypocalcemia may all negatively affect colonic motility. Inactivity and obesity may also contribute to an extended rectum transit time. Opiate and anticholinergic drug use can also cause constipation. The visceral movement of feces in the colon is caused by peristaltic movement. This substance is being moved farther and more quickly by enormous, migratory waves that periodically occur during the whole day. These waves constitute the “gastrocolic reflex” and are common after ingestion of a meal. Constipation could be caused by a decrease in or disappearance of these waves. Similarly, a rise in segmentation wave activity may make animal more likely to experience constipation. The most significant local factor influencing colonic function is nutrition. Cats who are older, heavier, have chronic kidney illness, or have experienced constipation in the past are more likely to experience it.

Secondary constipation is more common and is associated with processes that impair the transit and evacuation of colonic content, such as mechanical obstruction of the colon or rectum. It's may be due to intraluminal, extraluminal, or intrinsic (ie, neuromuscular) factors (Welches et al., 1992) . The most frequent type of obstruction is intraluminal, and it results from the inability to move poorly digested, frequently firm debris (such as hair, bones, or litter) combined with fecal material as a result of insufficient water intake or reluctance to defecate (due to stress, a dirty litter box, pain, or a tumor). Compression of the colon or rectum due to a restricted pelvic inlet may result in extraluminal blockage (caused by poorly healed pelvic fractures, enlarged sublumbar lymph nodes or prostate gland, or colonic stricture).

The colon, which is the last section of the intestine, serves to retain dried feces while also absorbing water and electrolytes. Any condition that makes it difficult for feces to move through the colon might cause constipation. As the mucosa continues to absorb water and electrolytes from the faecal bulk, retained feces becoming harder, drier, and eventually impact. This leads to ineffective transport of faecal solids and

hence constipation. Megacolon is severe dilation of the colon and is always accompanied by constipation (Bright, R.M., 1991).

Finally, some animals (usually cats) with chronic constipation may have megacolon, likely caused by a lesion of the neuromuscular bed of the colon. The etiology of megacolon often remains undiagnosed. Additionally, hypothyroidism, dysautonomia, abnormalities of the spinal cord (such as Manx sacral spinal cord malformation), pelvic nerves, hypokalemia, and hypercalcemia can all disrupt the neuromuscular regulation of the colon and rectum. Opioids, diuretics, antihistamines, anticholinergic medicines, sucralfate, aluminum hydroxide, potassium bromide, and calcium channel-blocking medications, among others, all promote constipation through various mechanisms. Some affected cases remain unnoticed due to lack of knowledge and delayed diagnosis. Some acutely affected cat die due to inaccurate diagnosis and ultimate wrong treatment. Moreover, to the best of our knowledge no report has been documented on the diagnosis, treatment and management of constipation of cat in Bangladesh. Therefore, this case report may would help the clinician for the proper diagnosis and accurate treatment of constipation in cat.

## Chapter 2

### Materials and Methods

#### **Case description and clinical history:**

A Two years old male Persian cat was attended in Bashundara area, Dhaka with the history of weakness, loss of appetite, abdominal pain, decreased to absent defecation, hyporexia, small, dry feces, abdominal straining, hind-limb paresis, vocalization during defecation, vomiting and lethargy last 7 days on 20th October 2022. Diet history includes any treats or supplements, as well as dry and canned food, brown rice, and fish, as well as a specified diet (containing protein and carbohydrate sources). Cross-examination also indicated a history of consuming excessive concentrate and a decreasing amount of fiber-rich foods. The animal received no prior treatment and was not dewormed.

#### **Clinical examination:**

The rectal temperature and respiration rate were confirmed to be normal during the clinical assessment. The patient was unsteady on their feet and displayed modest signs of dehydration and abdominal pain. Palpation of the abdomen reveals a firm materials.

#### **Laboratory examination:**

The animal was sent to the radiology department for an X-ray for additional confirmation and differential diagnosis. This examination is carried out to determine the true causes of constipation. Scoliosis have been found in X-ray image which is occurred due to continue straining.

#### **Diagnosis:**

A presumptive diagnosis of primary constipation was made on the basis of the clinical history and characteristic clinical signs. Further more Clinical examination and X-ray report findings showed that the cat had suffered from chronic constipation. Based on the results of the above-mentioned tests and examinations, the doctors confirmed that the cat had been diagnosed with chronic constipation.

**X-Ray Report:**



**Fig-1: Lateral view of x-ray**



**Fig: Scoliosis**



## **Treatment:**

Initially, the cat was treated with oral medication (1-4)

1.vitamin (b1,b2,b12) ( Tablet Solbion, Eskayef Pharmaceuticals limited ) at one third tab./4kg body weight single dose in a day for 7 days

2.Gabapentin (Gabastar ,Square Pharmaceuticals ltd. 100mg tab.) at 6mg/kg body weight single dose in a day for 7 days

3.lactulose (Avolac, Aristopharma ltd. 3.35gm/5ml in a 100 ml vial) at 400 mg/1 kg body weight three times daily for 7days

4.Simethicone (Flacol, Square Pharmaceuticals ltd. 67mg/ml in a 15-ml vial) at 25mg/kg body weight three times daily for 7 days

For the anal route, glycerol (glysup square pharmaceutical ltd. 1.15 gm suppository) is recommended. The health condition of the animal was found to not be improving after 7 days of the oral and anal route administration of medicine.

After 7 days, the patient came with an X-ray report with no improvement in complaint and the same clinical history as before, and the X-ray report confirmed the diagnosis of constipation. Finally, the doctor agreed to an enema to avoid further complications.lactulose solution is administered as an enema (5–10 mL/cat). Enemas are administered slowly with a lubricated (10–12) ml French feeding tube. Manual manipulation of the feces via abdominal palpation or per rectum (manual disimpaction) under general anesthesia .The following treatment was given for the next 7 days in post-operative care.

1.lactulose (Avolac, Aristopharma ltd. 3.35gm/5ml in a 100 ml vial) at 400 mg/4 kg body weight three times daily for 7days

2.Simethicone (Flacol, Square Pharmaceuticals ltd. 67mg/ml in a 15-ml vial) at 25mg/kg body weight three times daily for 7 days

3.Glycerol (glysup square pharmaceutical ltd. 1.15 gm suppository) single dose daily for 7 days

After 7days of continuous treatment, the cat was completely recovered.

## Precautions:

During constipation, animals stagnant urine into the bladder due to abdominal pain. Empty the urinary bladder completely before an enema, which will protect the bladder from blasting by manual manipulation.

## Enema Technique:



Fig: Empty the bladder



Fig: Enemas loading

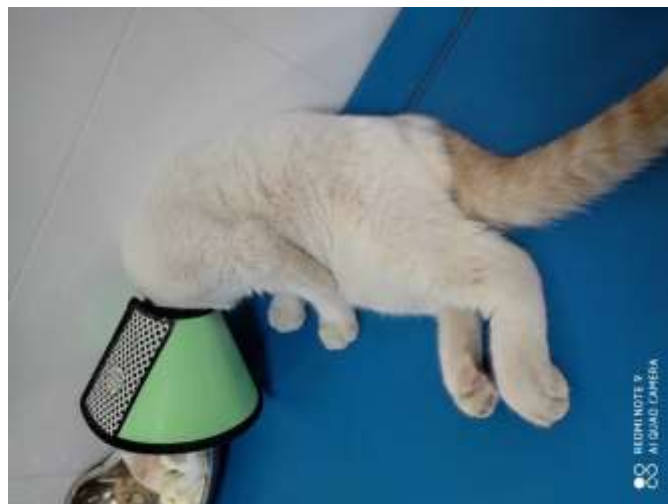


Fig: Cat after operation

## Chapter 3

### Results and Discussion

Hedlund (2002) states that idiopathic megacolon is most frequently diagnosed in middle-aged or older cats, with a mean age of roughly five to seven and a half years. However, in this instance, the cat was just approximately two years old, and the illness only lasted a brief time, suggesting that a food issue may have been the reason. There was no sign of pelvic fracture with malunion or sacro-caudal spinal/vertebral trauma, despite the presence of hind-limb paresis, which may be caused by suspected trauma to the spinal cord or nerves. Other reasons, like intramural, mural colonic, or recto-anal obstructive lesions, weren't ruled out during the enema. The ingestion of bacterial toxins may have contributed to the depression and appetite loss observed (Sherding, 1994).

Anti-flatulence medications and oral laxatives are among the medical interventions advised by Simpson and Else (1991). However, due to the extreme constipation and the amount of the colon damage as revealed by the post-X-ray, it was ineffective in this case (Simpson J.W. et al., 1991).

In addition, Webb (1985) stated that in the majority of cases where medical treatment fails, surgical removal of the fecal contents should be considered; nevertheless, in this instance, enema and oral medication were effective (Webb S.M. et al., 1985).

Despite the cat's extremely severe colonic distention, the three days preceding to the enema saw only minimal signs of depression and appetite loss. The cat's speedy recovery from the disease following the enema might be explained by this. Due to the cat's hind leg paresis when the current owner acquired it and the lack of a clear medical history, the etiology of the megacolon in this case could not be determined.

The cause of constipation in the majority of cats is unknown (Bright, 1986). Constipation can be caused by neuromuscular conditions, such as lumbosacral spinal cord diseases, that interfere with colonic innervation or make it difficult for cats to assume the proper defecation stance (Sherding, 1994).

Therefore, the likely causes of constipation in the current case could be related to neurologic abnormalities and dietary issues.

## **Conclusion**

The case study demonstrates how effective diagnosis and care can prolong the lives of constipated cats. The procedure can be administered by the pet veterinarian to an animal exhibiting identical clinical symptoms. This case study enables the cat's owner to provide less expensive therapy for constipation-affected animals.

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## **Biography**

**Sanu Akhter**, daughter of **Mr. Shah Alom** and **Mrs. Jahanara Begum**. She is an intern veterinary doctor under the faculty of Veterinary Medicine (FVM) in Chattogram Veterinary and Animal Sciences University (CVASU). She passed her Secondary School Certificate (SSC) Examination in 2013 from Chattogram board followed by Higher Secondary Certificate (HSC) Examination in 2015 from same board. In future she would like to do research work about pet and companion animal internal medicine, Zoonotic diseases and animal welfare .