

Study of Frequency of Some Stomach Surgical Pathologies in Dogs

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Abstract

Gastric pathologies pose a serious risk to the healthy condition in dogs. They are the most frequent in digestive tract and the most influential on the health and life conditions of dogs. If there was a correlation between animal age and increased frequency of stomach disease in the dog, it would be a good basis to prevent this pathology. During the period 2013-2019, all the data on gastric pathologies in dogs were processed, analyzed and compared among them. Epidemiology of stomach pathologies in dogs was studied in relation to age, breed and gender group. The most common type of stomach pathologies diagnosed by us resulted in inflammation of the stomach. The most frequent age-group affected by stomach pathologies resulted in 8-12 years old, while gender does not exhibit any special predisposition factor for these pathologies.

Keywords: gastritis, frequency, age, stomach ulcer

INTRODUCTION

Experience has shown that the pathologies of the digestive tract predominate in health problems of dogs. Because of its own construction and function, the gastrointestinal apparatus is always in

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communication with the external environment and is subject to the damaging action of various mechanical, physical, chemical and biological factors. Among the non-infectious pathologies encountered in the dog's digestive tract, gastric pathologies are the most frequent and most influential on the health and life of dogs. Through this study, the clinical features of gastric pathologies were compared to help and establish a quick and accurate diagnosis as well as to predict their later performance. In the prediction of the final result are influenced many variables such as type of pathology, general clinical control data, general and special clinical examination, and the other procedures include special diagnostic procedures such as radiological and ultrasound examination, laboratory tests (blood indicators, etc.) biopsy, histopathological examination as well as the speed and efficiency of medical treatment and surgical intervention.

Then, statistically, all the animals were counted by accumulating the affected dogs (based on age), in groups of over 6 animals.

The purpose of this study is to see if there is a correlation between age, breed, gender, and gastric pathology.

MATERIAL AND METHOD

To complete this study, 56 clinical cases with different pathologies of the stomach in dogs were presented in the Pet life Veterinary Hospital, in the Clinic of Medicine, Veterinary Faculty and in some private clinics of Tirana district during the period 2013-2019. The affected dogs were subjected to clinical control, general and special examination. Data was recorded and analyzed. The data collected was filed in a register that included all cases observed during the selected study period of time. The register contains information about clinical signs, general and special clinical examination, and their type of treatment.

The study included all cases where treatment was not possible because of insufficient financial resources, even if the treatment could be successful. Epidemiology of dog stomach pathologies was studied in relation to:

- Age
- Breed
- Gender

Depending on the age of affected dogs, stomach tumors were also classified according to these age groups:

- Dogs aged 1-4 years old
- Dog aged 4-8 years old
- Dog aged 8-12 years old
- Dogs over 12 years of age

For study purposes, also based on scientific methodology, our checked dogs were grouped according to breed as follows:

I.Terrier Group

In this group are breeds characterized from small to medium size. (American Terrier, Pit Bull, Australian Terrier, Fox Terrier, Manchester Terrier, Miniature Schnauzer, Norfolk Terrier, White Terrier).

II.Toy Group (Amusing Dog)

Dogs of this group are characterized by playfulness and friendship with humans and animals. (Belgian Griffon, Chihuahua, English Toy Spaniel, Miniature Pinscher, Pekingese, Pug).

III. Sports Group

Sports breed are all hunting dogs that are widespread in our country. Some of them are: Pointer, Retriever, Setter, Cocker, Spaniel, Spinone Italiano.

IV. Dog Guardian Group (dog-guard)

This group has the ability to control the movement of flocks of other animals as well as the protection of property or people. This group is represented by: Belgian Sheepdog, Collie or Scottish Pastor, German Pastor, Rottëailer, Doberman, Siberian Husky, Samoyed.

V. Crossbreed (Metis)

This group represents the bulk of the dogs in our country due to uncontrolled intersections or their origins. They are a diverse and widespread group.

RESULTS

The most common type of stomach pathologies diagnosed by us resulted in 39.2% gastric inflammation and then 28.6% foreign body

stomach were diagnosed. The frequency of stomach pathologies in the dog diagnosed is given in Table no. 1

Table No. 1 Frequency of stomach pathologies

| Type of stomach pathologies | No. of cases | Frequency (%) |
|--|--------------|---------------|
| Inflammation of the gastric mucosa - Gastritis | 22 | 39.2% |
| Stomach ulcer | 13 | 23.2% |
| Gastric torsion | 5 | 8.9% |
| Foreign bodies in the stomach | 16 | 28.6% |
| All | 56 | 99.9% |

The most affected group by the stomach pathology resulted in an age group of 8-12 years. Thus, in this age group, were diagnosed 25 cases (44.6%) of the stomach pathologies in which prevails the inflammation of the gastric mucosa.

Tab No. 2. Frequency of stomach pathologies by age group

| Type of stomach pathologies | Age (years old) | | | |
|--|-----------------|-------|-------|---------|
| | 1-4 | 4-8 | 8-12 | Over 12 |
| Inflammation of the gastric mucosa - Gastritis | 1 | 5 | 12 | 4 |
| Stomach ulcer | - | 1 | 7 | 5 |
| Gastric torsion | - | 3 | 2 | - |
| Foreign bodies in the stomach | 1 | 7 | 4 | 4 |
| All | 2 | 16 | 25 | 13 |
| | 3.6% | 28.5% | 44.6% | 23.2% |

During this study, it was found that the most affected breeds of dog stomach pathologies are Terrier and Sports races. Of these two groups, stomach pathologies were most diagnosed in the Terrier breed group (24 cases or 42.8%), while in the group Sport less (13 cases or 23.5%).

Table no. 3 Frequency of stomach pathologies according to breed-group

| Type of stomach pathologies | Breed | | | | |
|--|---------|-------|---------|----------|-------|
| | Terrier | Toy | Sportiv | Guardian | Metis |
| Inflammation of the gastric mucosa - Gastritis | 11 | - | 5 | - | 6 |
| Stomach ulcer | 4 | - | 5 | 1 | 3 |
| Gastric torsion | 1 | - | 2 | - | 2 |
| Foreign bodies in the stomach | 8 | 6 | 1 | - | 1 |
| all | 24 | 6 | 13 | 1 | 12 |
| | 42.8% | 10.7% | 23.2% | 1.7% | 21.4% |

Also from the data so far these pathologies were diagnosed more frequently in male dogs than in female dogs.

Table no.4 Frequency of stomach pathologies according to Gender

| Type of stomach pathologies | No of cases | Females | Males |
|--|-------------|---------|-------|
| Inflammation of the gastric mucosa - Gastritis | 22 | 9 | 13 |
| Stomach ulcer | 13 | 6 | 7 |
| Gastric torsion | 5 | 2 | 3 |
| Foreign bodies in the stomach | 16 | 9 | 7 |
| all | 56 | 26 | 30 |
| | 99.9% | 46.4% | 53.5% |

CONCLUSIONS

- ❖ Dog stomach pathologies are frequent and cause significant damage in their healthy condition.
- ❖ The most common type of stomach pathologies diagnosed by us has resulted gastritis
- ❖ The most affected age by stomach pathologies is the group from 8 to 12 years old, while gender does not exhibit any special predisposition for these pathologies.
- ❖ The most affected dogs breeds are Terrier and Sports breed.
- ❖ The most affected age group by the stomach pathology resulted the age dogs group of 8-12 years old.

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