

IBD IN DOGS

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IBD is no longer the monopoly of birds, it can affect dogs too! The IBD being referred to here is Inflammatory Bowel Disease, a syndrome characterized by persistent clinical signs suggestive of gastric and intestinal inflammatory involvement. The exact aetiology is unknown. However, it is generally accepted that hypersensitivity to antigens like feed ingredients and other materials that constantly contact the gastrointestinal mucosa may be the culprit. Histological findings indicate infiltration of the stomach and intestinal walls by different kinds of inflammatory cells.

There is no age, sex, or breed predisposition to IBD. But, the German Shepherd Dogs and Boxers are the most commonly affected among the breeds we routinely come across. The condition can also affect cats.

Clinical Signs of IBD

Clinical signs are usually chronic in nature, but may also occur intermittently. The prominent signs may vary depending on the part of the gastrointestinal tract affected. Chronic vomiting, alterations in appetite or anorexia, weight loss, diarrhea, straining to defecate, increased urgency or frequency of defecation, passing small quantities of loose stools accompanied by a lot of straining, and presence of blood and/or mucus on the surface of the stool may be seen.

Diagnosis

Practically speaking, chronic gastrointestinal signs not responding to the routine therapy for common causes for gastrointestinal inflammation are suggestive of IBD. (However, it has to be borne in mind that all treatments should have been done according to the standard recommendations like the dose and course of medications as in the use of antiparasitic drugs and antibacterial/protozoal agents. Also, partial or complete obstructive lesions

of the gastrointestinal tract that may cause similar clinical signs should also be ruled out).

Plain radiography (gas/fluid distention of the stomach and increased diameter of the intestinal loops), contrast radiography (diffuse/focal abnormalities of the mucosal lining), ultrasonography (thickening of intestinal walls), endoscopy (mucosal thickening, erythema, friability, increased granularity, erosion and ulceration), exfoliative gastrointestinal tract cytology (increased inflammatory cells), and endoscopic/surgical biopsy (increased plasma cells, lymphocytes, eosinophils and neutrophils in lamina propria; however, other causes for these should be ruled out) may be helpful in diagnosis. Microscopical examination and laboratory tests on the fecal samples and serum analysis of affected animals help us identify other causes for the gastrointestinal signs like parasitic infestations, bacterial and protozoal infections, pancreatic insufficiency etc. Plain and contrast radiography also help us identify obstructive lesions of the gastrointestinal tract which also cause persistent gastrointestinal signs.

Treatment

The management of IBD in dogs requires a multipronged approach, all directed at alleviating the hypersensitivity type inflammatory response in the gastrointestinal mucosa. However, it has to be borne in mind that any overlying condition like parasitic, protozoal and bacterial infections should also be properly addressed for satisfactory remission.

1. Novel protein diet: An attempt should be made to identify a common protein source which is regularly included in the diet of the affected dog. This protein source should be completely avoided and a new protein introduced (novel protein diet). Many standard text books recommend the complete replacement of diet with rice and cottage cheese

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or rice and lamb. In India milk is a common ingredient of the diet even in adult dogs. So, cottage cheese may not be a wise choice. Lamb may also not be practical in our domestic conditions. Availability and cost of the ingredients have to be taken into account. A practical solution is to go for a combination of rice and beef, chicken, fish, egg or vegetable protein, making sure that the protein source is novel for the affected dog. Sometimes rice may have to be replaced with potato, tapioca or any other feasible carbohydrate source.

2. Corticosteroids: Prednisolone may be administered at the rate of 1-2 mg/kg body weight every 12 hours for two weeks. The same dose may then be given every 24 hours for the next two weeks. The frequency of administration of the drug may then be reduced to once in 48 hours and slowly tapered and discontinued or maintained at the minimal required level.

3. Metronidazole: Metronidazole not only has anti bacterial and antiprotozoal action but also an immunomodulatory effect on the gastrointestinal mucosa. It can be administered at the rate of 10-20 mg/kg body weight twice to thrice a day.

4. Other immunomodulatory/ antiinflammatory drugs: Azathioprine and cyclosporine may be used as immunosuppressive agents but are recommended only in cases that do not respond to dietary change and corticosteroids as they can cause serious side effects and are costly. Sulfasalazine and its relatives may be used for the anti-inflammatory action they exert on the mucosa especially in colitis in dogs. However, use of the former is associated with adverse side effects.

5. Dietary fibre: Plain bran or psyllium added

to the diet has been found to improve clinical signs when the large intestines are involved. (Addition of fibre in diet is very useful in Fibre Responsive Diarrhea (FRD) and Irritable Bowel Syndrome (IBS). Though these conditions are different from IBD, addition of these fibre sources may be useful if they have not already sensitized the gastrointestinal mucosa in affected dogs). One teaspoon to two table spoons of these agents may be mixed to each meal depending on the size of the patient.

Conclusion

Inflammatory Bowel Disease, though globally recognized as a common cause for worry to many companion animal owners, is yet to establish itself as a frequently identified condition in our day-to-day clinical practice. However, with the drastic changes taking place in the diets of pet dogs and the unprecedented entry of large number of dogs from the international market into the domestic front, the condition has already started making its existence felt. Awareness of "new" diseases like IBD and adoption of scientific approaches in dealing with them would be definite requirements for successful veterinary practice in the days to come.

References

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