

## **GASTROINTESTINAL ENDOSCOPY IN DOGS**

Your dog has been scheduled for an endoscopic examination. The purpose of this procedure is to make a diagnosis of the disease which has been causing your pet's clinical signs of vomiting, diarrhea, or both.

### ***What is an endoscope and how is it used?***

An endoscope is a flexible tube that is inserted into either the stomach or the colon or both. As it passes toward the stomach, the esophagus is also examined. The endoscope permits viewing of the inside of these organs.

### ***What types of disease are diagnosed with an endoscopic examination?***

The endoscope allows full color viewing of the aforementioned organs. Areas of inflammation or ulceration are easily seen. Masses and strictures are also visible. Foreign bodies (bones, toys, rocks, coins, hair balls, etc.) may also be seen.

### ***Can viewing an abnormal area render a diagnosis?***

In most cases, no. However, the endoscope has a tiny channel through which a biopsy instrument can be passed. Precise biopsies can be taken of areas of any of these organs that appear abnormal.

### ***What do you do if there are no abnormal areas?***

Many diseases cause changes that can only be detected by an inspection of the cells. Therefore, even if the organ appears normal, biopsies are taken. In most cases, biopsy of the stomach of a vomiting dog or of the colon of a dog with diarrhea will be very helpful in determining if disease is present.

### ***What if the problem is in the small intestine?***

The endoscope can be passed through the valve at the lower end of the stomach (pylorus) and into a short segment of the small intestine (duodenum) in some dogs. This depends on the size of the dog and the size of the endoscope. However, the vast majority of the small intestine is not accessible to endoscopy. Most diseases of the small intestine require other tests to be diagnosed.

### ***Can cancer be diagnosed with endoscopy?***

In many cases, yes. However, some tumors do not affect the lining of the stomach or colon. The biopsy procedure only samples the lining (the mucosa), so it is possible to fail in detecting the presence of a tumor.

### ***What steps need to be taken to prepare for endoscopy?***

It is vital that the inspected organs be empty of food and water. If the stomach is to be examined, withholding food and water for 12 hours is generally sufficient. If the colon is to be examined, oral medication is begun 12-18 hours before the procedure to remove fecal material from the entire intestinal tract. Fasting for 12-18 hours is also vital so new fecal material does not form. On the morning of the procedure, one or more enemas are given to remove any remaining stool from the lower intestinal tract.

***Is anesthesia required?***

Yes. Passing an endoscope into a dog's stomach or colon is not possible in an awake patient. Furthermore, patient cooperation is vital since the equipment that is used costs several thousands of dollars and is quite fragile. Even for endoscopy of the colon, a short-acting anesthesia is essential.

***When will I know the results of the examination?***

Since the organs are viewed in real time, the result of what is seen is known immediately. However, the diagnosis is not available in many cases until the results of the pathologist's study of the biopsies are reported. This will vary from a day to a week depending on the location of the pathologist and whether or not special tests are required on the tissue.