

Digestive Tract Intestinal Epithelial Tumors

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These notes are provided to help you understand the diagnosis or possible diagnosis of cancer in your pet. For general information on cancer in pets ask for our handout "What is Cancer". Your veterinarian may suggest certain tests to help confirm or eliminate diagnosis, and to help assess treatment options and likely outcomes. Because individual situations and responses vary, and because cancers often behave unpredictably, science can only give us a guide. However, information and understanding about tumors and their treatment in animals is improving all the time.

We understand that this can be a very worrying time. We apologize for the need to use some technical language. If you have any questions please do not hesitate to ask us.

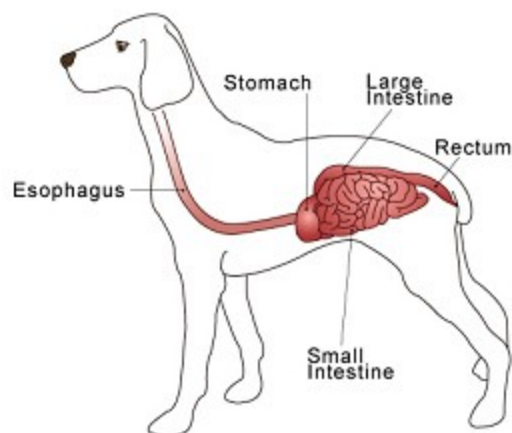
What are these tumors?

Tumors of the intestinal epithelial lining include non-cancerous polyps, benign adenomas and malignant epithelial tumors (adenocarcinomas). The polyps and adenomas may be multiple and cause local obstruction. The malignant tumors cause progressive illness and often spread (metastasize) before clinical diagnosis. Secondary or metastatic tumors may occur in the lymph nodes (glands), on the inside lining of the abdomen (peritoneum) and in the liver and lungs. Survival time with malignant intestinal tumors is often only months, although it is longer if the tumor has not spread before surgery.

What do we know about the cause?

The reason why a particular pet may develop this, or any cancer, is not straightforward. Cancer is often the culmination of a series of circumstances that come together for the unfortunate individual.

Cancer induction is a multi-step process called tumor progression. Some cancers never progress past the first stages, so they remain benign. Others progress rapidly. It is probable that infections or certain chemicals are implicated in initiating or promoting this process but we do not have any specific knowledge of the causes.



Digestive System

Why has my pet developed this cancer?

Some animals have a greater tendency (genetic susceptibility) to cancer. Some breeds have far more cancers than others, often of specific types. The more divisions a cell undergoes, the more probable is a mutation so cancer is more common in cells that divide frequently, or in older animals whose cells have undergone more divisions.

Are these common tumors?

Intestinal tumors are uncommon in dogs. The average age of affected dogs is 9 years. The majority (60%) of the tumors are in the lower bowel, the colon and rectum.

In cats, the tumors are rarer than in dogs but male cats and Siamese breeds are more at risk. The age range is 2-17 years. They are usually in the small intestine with most occurring at the junction with the large bowel.

How will these cancers affect my pet?

"Clinical signs of intestinal cancer are weight loss, loss of appetite, vomiting, diarrhea and blood in vomit or feces."

The usual clinical signs of intestinal cancer are weight loss, loss of appetite, vomiting, diarrhea and blood in vomit or feces. Vomiting tends to occur more with tumors in the upper (small) intestine while diarrhea is more common with tumors of the lower (large) intestine. Constipation rather than diarrhea is sometimes a sign. In some cases, your veterinarian may palpate (feel) an abdominal lump. Blood protein levels may be low due to the effects of cancer, and this may cause generalized swelling of the abdomen from fluid accumulation (ascites), or fluid may accumulate in the tissues under the skin (edema).

How are these cancers diagnosed?



Your veterinarian may suspect intestinal cancer, based on your pet's clinical signs and the results of a physical examination. X-rays may be useful in detecting some tumors. Blood tests are not diagnostic but sometimes indicate if the tumor is bleeding internally or if the blood protein levels are low. In order to identify the tumor, it is necessary to obtain a sample of the tumor itself. Depending on the suspected location and clinical signs, your veterinarian may recommend endoscopy or exploratory surgery to obtain the appropriate samples. Small biopsies taken with the aid of an endoscope are sometimes diagnostic for tumors of the rectum and colon but examination of a larger surgical specimen is often needed. After submission

to a specialized veterinary laboratory, the tissue samples will be examined using histopathology (microscopic examination of specially prepared and stained tissue sections). A veterinary pathologist will reach a diagnosis and prognosis based on the histopathology findings.

What types of treatment are available?

Treatment is surgical removal of the tumor.

Non-steroidal anti-inflammatory drugs (NSAIDs) can protect against colon cancer in people, possibly because they reduce the formation of compounds called prostaglandins. In one study in dogs, tumors in the rectum were reduced in size by treatment with suppositories of one of these drugs, piroxicam.

Can these cancers disappear without treatment?

In general, cancer rarely disappears without treatment but as development is a multi-step process, it may stop at a certain stage. The body's own immune system can kill cancer cells but it is rarely 100% effective. Rarely, loss of blood supply to a cancer will make it die but the dead tissue will probably need surgical removal.

How can I nurse my pet?

After surgery, the operation site needs to be kept clean and your pet should not be allowed to interfere with it. Any loss of sutures or significant swelling or bleeding should be reported to your veterinarian.

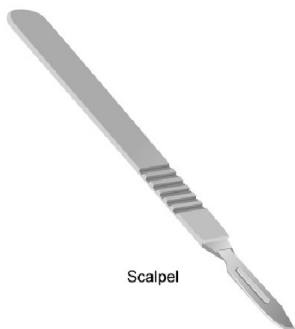
Your pet may require a special diet and you may be asked to check that your pet can pass urine and feces or to give treatment to aid this. If you require additional advice on post-surgical care, please ask.



How will I know how the cancer will behave?

The histopathology report will give your veterinarian the diagnosis that helps to indicate how it is likely to behave. The veterinary pathologist usually adds a prognosis that describes the probability of local recurrence or metastasis (distant spread).

When will I know if the cancer is permanently cured?



'Cured' has to be a guarded term in dealing with any cancer.

Adequate surgical removal of polyps and benign tumors of the rectum and colon usually results in recovery but many are multiple so further tumors grow. In people, larger tumors recur more commonly and become malignant more frequently. Microscopic grading and staging of the tumor helps to indicate the probability of recurrence.

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Surgery is not curative for intestinal tumors with microscopic evidence of spread at the time of surgery. The median survival time for these dogs is approximately three months. The median survival time without microscopic evidence of spread at the time of surgery is approximately 15 months. In order to make this microscopic assessment, your veterinarian has to submit a lymph node (gland) for histopathology, in addition to the tumor sample.

The efficacy of other treatments has not been fully assessed but, in people, there is little convincing evidence to indicate additional therapy improves survival time.

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The great majority (90%) of intestinal tumors in cats are malignant. Most will have metastasized (spread) by the time of diagnosis. Average survival time is 15 months with a range of two days to two years.

Are there any risks to my family or other pets?

No, these are not infectious tumors and are not transmitted from pet to pet or from pets to people.

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