

Eye Tumors - Intraocular

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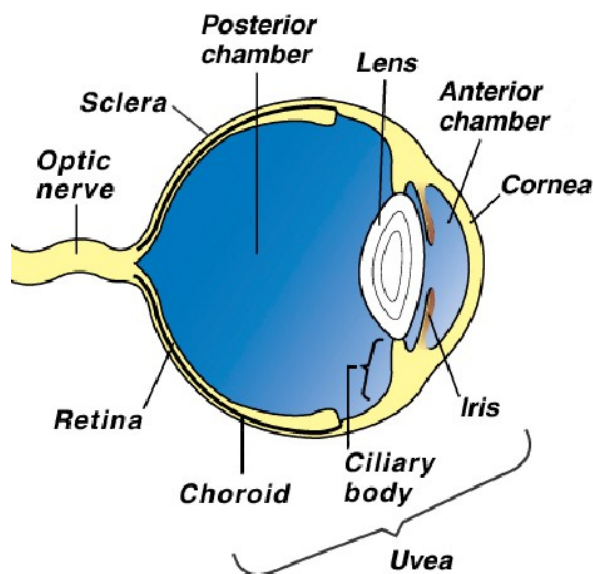
These notes are provided to help you understand the diagnosis or possible diagnosis of cancer in your pet. For general information on cancer in pets ask for our handout "What is Cancer". Your veterinarian may suggest certain tests to help confirm or eliminate diagnosis, and to help assess treatment options 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. If you have any questions please do not hesitate to ask us.

What are these tumors?

These are tumors arising from structures within the eye.

The most common intraocular tumors originate from the melanin producing cells (discussed in a separate handout). The second most common group affects the iris and ciliary body (anterior uveal tract) causing non-cancerous iridociliary cysts, benign adenomas and malignant adenocarcinomas. There are rare tumors of the nervous tissue in the eye and, in cats, a malignant tumor that occurs as long as ten years following an injury to the lens ('feline primary ocular sarcoma' or 'post-traumatic sarcoma'). Blue-eyed dogs also have a specific benign tumor of the iris (spindle cell tumor). Some tumors originate elsewhere in the body but settle and grow in the eye as metastases. The most common of these are tumors of lymphoid cells (lymphosarcoma or lymphoma).



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.

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Feline primary ocular sarcoma follows injury to the eye of cats and the spindle cell tumor of blue-eyed dogs has genetic factors implicated. Little is known about causes of the other tumors.

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 older animals. A few rare tumors are developmental problems so they occur in young animals.

Are these common tumors?

These are all rare tumors. Iridociliary cysts and tumors are the most common of this group in dogs; they are very rare in cats. Lymphosarcomas originating from lymphoid cells are most common in cats.

How will these cancers affect my pet?

All of these tumors, even the benign ones, tend to result in an increase in the internal pressure, causing glaucoma, which then leads to blindness. Sometimes these tumors cause intraocular hemorrhage (bleeding within the eye).

"...intraocular tumors are clinically important even when small..."

Therefore, intraocular tumors are clinically important even when small in size. They are often suspected even when direct observation of the tumor is impossible because they cause glaucoma or intra-ocular haemorrhage. Other tumors form nodules and swellings or opacities that can be seen by examination with an ophthalmoscope. Some small tumors may not be causing clinical disease at the time of diagnosis, but others cause uveitis (inflammation), glaucoma (increased ocular pressure), hemorrhage or optic nerve compression. All these will result in blindness. Many of these tumors cause your pet pain, especially if glaucoma or uveitis develop.

Feline post-traumatic sarcoma is highly malignant and spreads all round the eye and into adjacent tissues causing opacity of the eye, swelling, pain and blindness.

How are these cancers diagnosed?

Clinically, your veterinarian may suspect an intraocular cancer if there is swelling, opacity or redness inside the eye. Ultrasonography may help to delineate the masses when they are not visible. Accurate diagnosis of the tumor and prediction of behavior (prognosis) rely on microscopic examination of tissue (histopathology). Your veterinarian will submit tissue samples to a specialized laboratory for examination and diagnosis by a veterinary pathologist.



What types of treatment are available?

Unfortunately, surgical removal of these tumors involves removal of the eye.

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Can these cancers disappear without treatment?

In general, cancer very rarely disappears without treatment. Very occasionally, spontaneous loss of blood supply to the cancer can make it die but the dead tissue will still need surgical removal. The body's immune system is not effective in causing these tumors to regress.

How can I nurse my pet?

After surgery, your pet may need to wear an "Elizabethan collar" to prevent your pet rubbing his or her eye socket and interfering with the operation site. Specific medication such as antibiotics or anti-inflammatory drugs may be prescribed. You will need to make sure that the operation site remains clean and dry. Report any loss of stitches or significant swelling or bleeding to your veterinarian. 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).

How will I know if the cancer is permanently cured?

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

Almost all of these tumors (including iridociliary cysts and tumors and rare tumors such as medulloepithelioma and spindle cell tumor of blue eyed dogs) can be cured by removal of the eye.

Post-traumatic sarcoma of cats is highly malignant and the tumors recur and spread into the optic nerve and other adjacent tissues with possible distant metastasis. With this tumor, surgical cure cannot be guaranteed.

Tumors that have spread (metastasized) from elsewhere in the body usually indicate widespread, advanced disease and, sadly, cure is not possible. Among these are lymphosarcoma and hemangiosarcoma.

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.