

Information for Oncology Clients

Lymphoma in Cats

Comprehensive Cancer Care Service

Ryan Veterinary Hospital of the University of Pennsylvania

Lymphoma is one of the most common cancers diagnosed in cats. It is a cancer of the lymphocytes (a type of white blood cell) and lymphoid tissues. Lymphoid tissue is normally present in many places in the body, including lymph nodes, spleen, liver, gastrointestinal tract, and bone marrow.

Cats of any age, breed, and sex can be affected. The feline leukemia virus (FeLV) has been shown to cause lymphoma in cats. Cats infected with the feline immunodeficiency virus (FIV) are also at higher risk for developing lymphoma. We typically see lymphoma in younger cats that are infected with FeLV or FIV and in older cats that are not infected with either virus.

Lymphoma in cats is often classified based on its location and the size of the cancer cells. It can occur in a variety of anatomic locations, with the most common being the gastrointestinal tract, nasal cavity, mediastinum (area in the chest between the heart and lungs), and kidneys. Lymphoma is most often classified as small cell or large cell based on the underlying cell of origin, though other less common cell types can occur as well.

Diagnosis and Initial Evaluation

A biopsy (tissue) or cytology (needle aspirate) sample is required in order to make a diagnosis of lymphoma. In some cases, we can obtain a diagnosis without surgery. However, in other cases, we may need to perform a surgical biopsy to obtain adequate tissue to confirm the diagnosis. The ease with which a diagnosis can be made depends upon where the tumor is located.

A complete evaluation of a cat suspected of having lymphoma includes a search for tumor in other locations, known as staging. A complete blood count (CBC), serum chemistry profile, urinalysis, and FeLV/FIV testing are recommended and provide important information regarding the effects of the cancer on body functions as well as the ability of the patient to handle chemotherapy. An abdominal ultrasound allows us to evaluate the liver, spleen, internal lymph nodes, and intestinal tract for possible tumor involvement. Chest x-rays allow us to look for internal lymph nodes, lung

Information for Oncology Clients

involvement, an enlarged mediastinum, or fluid around the lungs. Once we have these results, we can then decide upon the treatment recommendations for an individual cat.

Treatment and Prognosis

Chemotherapy is the standard of care for treatment of lymphoma. There may be some situations when surgery (e.g. to obtain a biopsy or remove an intestinal mass) or radiation therapy (e.g. if the cancer is localized to one site) may also be indicated, usually in addition to chemotherapy. Specific recommendations will be discussed with you based on your pet's particular situation.

Small cell lymphoma is usually a chronic, indolent disease and can often be controlled with oral chemotherapy administered at home, typically in conjunction with oral prednisone (a steroid). Your cat would need routine bloodwork to monitor for any chemotherapy side effects, such as a low white blood cell count. Cats with small cell lymphoma are generally expected to have a higher response rate to chemotherapy and longer survival time compared to cats with large cell lymphoma.

Large cell lymphoma is more aggressive in behavior and requires a more intensive chemotherapy regimen. Several different drugs are alternated or combined in order to reduce the chance that tumor cells will become resistant and reduce the risk of side effects. Some of these drugs are given as injections in the hospital and others orally at home. Oral prednisone is also included in the treatment plan. Bloodwork and/or imaging (x-rays, ultrasound) are generally repeated at regular intervals to look for side effects (such as a low white blood cell count) and to determine if a cat is in remission.

Remission is defined as the complete disappearance of detectable cancer. However, microscopic amounts of tumor cells can remain hidden in the body. A remission is NOT a cure, but it does allow your pet to experience a good quality of life. Because of this, chemotherapy should be continued even after remission has been achieved. The exact drugs and schedule will depend upon how aggressive the cancer is behaving, how sick an animal is at the start of treatment, and any abnormalities in organ function, especially the kidneys and liver.

Side effects of chemotherapy in cats include nausea, vomiting, loss of appetite, diarrhea, extreme tiredness, or infection. We treat cats with anti-nausea and anti-diarrhea medications, as well as

Information for Oncology Clients

antibiotics if there is a concern for infection. If any of these side effects are serious or intolerable, we can consider either lowering the dose of the offending drug or substituting a different drug. Cats do not lose their hair but may lose their whiskers and develop a different texture to their fur.

If a patient comes out of remission (recurrence of the cancer), we can try achieve a second remission using either new combinations of the same drugs or different drugs altogether. Unfortunately, the chances of obtaining a second remission are lower, and the risk of side effects may be higher. However, there are some cats that do respond and have additional time with a good quality of life.

November 2017