



Canine Lymphoma

Lymphoma is the most common cancer formed from blood cells that occurs in dogs and cats. However, the chance of any one dog developing this disease over any one-year period is less than 1 in 1000. This disease is similar to non-Hodgkin's lymphoma in people, and has been called lymphosarcoma and malignant lymphoma. The different names don't indicate any difference in the condition, however. Lymphocytes are the type of white blood cell that produce antibodies (B cells) and help to fight against viruses and cancers (T cells). Most lymphomas are due to cancerous B cells. Because the natural behavior of lymphocytes is to circulate around the body, once cancerous the same behavior continues. We don't tend to think of lymphoma in the same way as many other cancers, originating at one point and then spreading, in that they are typically systemic, or body-wide, regardless of where the disease is detectable. For most, the cause of the disease is unknown, although there may be a connection in both dogs and people to exposure to paints and solvents. In cats, sharing a house with smokers can increase the risk as does FIV, the feline "AIDS" virus. Dog breeds such as the Boxer and Golden Retriever appear to be at increased risk. There has been a line of bullmastiffs reported with an extremely high risk of lymphoma. The exact reasons for these predispositions are unknown.

The disease is rapidly fatal. Most dogs are dead within 2 months of diagnosis if treatment is not initiated promptly. This is an average figure - some dogs will have less aggressive forms and live for 6 or 7 months, whilst some will be dead within days. Most dogs develop the high-grade (aggressive and rapid) form. Treatment can be either palliative or can aim to reduce the cancer burden directly. Palliative therapy is generally corticosteroid ("cortisone") tablets, which can produce a dramatic short-term benefit in about half of all patients. Length of life is not improved, but quality of life is often much better. The only therapy proven to be very effective in pets is medical therapy. Drugs are used to kill large numbers of cancer cells (typically in the order of 99.999%), which places the patient into remission. Remission means that the tumor cannot be detected, and is unable to cause any symptoms. Hence your pet will have normal quality of life. For the majority of patients there exists a therapeutic "window" such that medication can result in complete remission for good periods of time, with ZERO side effects. With all treatments, there exists a risk, and around 1 in 20 patients will have serious reactions to the medication.

The patients that do best with treatment tend to have B cell lymphoma (this can only be evaluated by doing a specific test on a tissue sample), are not showing signs of obvious illness at the time of diagnosis, and do not have the beginning of treatment delayed. For most, the age of the patient, or how advanced the disease is at diagnosis does not seem to alter success.

Treatment can be given in many different ways. The most effective therapy uses many different drugs in rotation, with the aim of delaying the development of resistance within the cancer. Around 85% of dogs that receive treatment go into remission, and typically within days or weeks. Dogs receiving therapy have a 50% chance of still being alive 15 months after treatment first started and around a 15% chance of cure. For cats, around 2 out of 3 go well initially, with 1 out of 3 likely cured. The drugs are used in such a way that quality of life is more important than length of life. This lowers the cure rate, but means that however long they live for, they enjoy that period of time. Treatment is generally given for 6 months. Other treatments are available that are simpler, and these may only require as little as 5 treatments over 15 weeks. The longer-term success with these shorter treatments is not as good, however.

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