



# Canine Lymphoma

Canine lymphoma (or lymphosarcoma) is one of the most common cancers diagnosed in dogs. Receiving this diagnosis for your beloved companion can be frightening, but there are many treatment options available. This handout aims to provide you with basic, clear information about what lymphoma is, how it is diagnosed, and the treatment options we can explore together.

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## What is Lymphoma?

Lymphoma is a general term for a group of cancers that originate from **lymphocytes**, a type of white blood cell. These cells are part of the **lymphatic system**, which is a vital part of the immune system that runs throughout your dog's body.

When a dog has lymphoma, these cancerous lymphocytes begin to accumulate, most commonly in the **lymph nodes**, but they can also affect almost any organ.

## The Lymphatic System and Where Lymphoma Strikes:

- **Lymph Nodes:** These are small, bean-shaped glands that filter the lymph fluid. They are the most common site for lymphoma.
- **Spleen and Liver:** These organs are part of the lymphatic system and are often involved.
- **Bone Marrow:** The tissue where blood cells are produced.
- **Gastrointestinal Tract (GI):** The stomach and intestines can sometimes be the primary site.
- **Other Sites:** Less commonly, lymphoma can affect the skin, eyes, or central nervous system.

## The Most Common Type and Clinical Signs

There are several types of canine lymphoma, but over 80% of cases fall into the most common category: **Multicentric Lymphoma**.

### ! Recognizing the Signs (Multicentric Type)

The hallmark sign of multicentric lymphoma is the **painless enlargement of peripheral lymph nodes**. You may notice lumps that feel like firm, non-mobile grapes or almonds under your dog's skin in the following areas:

- **Under the Jaw** (Mandibular)
- **In Front of the Shoulders** (Prescapular)
- **In the Armpits** (Axillary - *less common*)
- **In the Groin** (Inguinal)
- **Behind the Knees** (Popliteal)

There can be additional non specific symptoms.

## Treatment Options

Lymphoma is generally not considered curable, but it is one of the most **chemosensitive** cancers, meaning it often responds very well to chemotherapy. The goal of treatment is to achieve **remission** (the disappearance of all clinical signs of the cancer) and provide a good quality of life for your dog.

### 1. Chemotherapy (The Standard of Care)

- **Multi-Drug Protocols (e.g., CHOP [chemotherapy]):** This is the most common and effective treatment. It involves a combination of different chemotherapy drugs administered over a period of 4-6 months.
  - *Expected Remission:* Approximately **80-90%** of dogs achieve remission.
  - *Median Survival Time:* Typically **10-14 months** with a good quality of life.
- **Single-Agent Protocols (e.g., Doxorubicin or Prednisone):** Used in certain cases, or if owners prefer a simpler, less intensive approach.

**A Note on Side Effects:** Unlike in humans, chemotherapy in dogs rarely causes severe side effects like hair loss (except in some specific breeds). The goal is to use doses that are effective against cancer but **gentle enough to maintain a high quality of life**.

### 2. Palliative Care (Quality of Life Focus)

- **Prednisone:** This is a steroid that can temporarily cause the lymph nodes to shrink, reduce clinical signs, and make your dog feel better.
  - *Important Note:* Giving prednisone alone *before* starting a chemotherapy protocol can make the cancer resistant to the stronger drugs later. We recommend using it only when the decision is made to **not** pursue full chemotherapy.
  - *Median Survival Time:* Typically **1-3 months**.



# Diagnosis and Staging

Diagnosis and staging help us determine the best treatment plan and prognosis.

## 1. Diagnosis (Confirming Lymphoma)

- **Fine Needle Aspirate (FNA):** A simple, minimally invasive procedure where a small needle is used to collect cells from an enlarged lymph node. These cells are examined under a microscope (**Cytology**) to confirm the presence of lymphoma.
- **Biopsy:** A small piece of the node is surgically removed for a more definitive diagnosis (**Histopathology**), which may be necessary if the FNA is inconclusive.

## 2. Staging (Determining Extent)

Lymphoma is categorized into **Stages I through V** based on how far the cancer has spread.

Stage	Description
I	Involvement of only one lymph node region.
II	Involvement of multiple lymph nodes on only one side of the diaphragm.
III	Generalized lymph node involvement. ( <b>Most common presentation</b> )
IV	Involvement of liver and/or spleen.
V	Involvement of bone marrow, blood, or other non-lymphoid organs.

### Staging Tests May Include:

- Blood work (Complete Blood Count, Chemistry Panel)
- Urinalysis
- Chest X-rays
- Abdominal Ultrasound

## ❤️ Prognosis and Quality of Life

The prognosis for canine lymphoma is often measured in **median survival time (MST)**, which is the average time from diagnosis to end-of-life.

Treatment Choice	Median Survival Time (MST)	Primary Goal
<b>Multi-Drug Chemotherapy</b>	10 - 14 months	<b>Remission</b> and Excellent Quality of Life
<b>Prednisone Only</b>	1 - 3 months	<b>Symptom Control</b> and Good Quality of Life
<b>No Treatment</b>	4 - 6 weeks	<b>Comfort</b>

### Our Commitment to You:

The goal of any treatment plan we choose is to ensure your dog is comfortable, happy, and has an excellent quality of life for as long as possible. We will monitor your dog closely and make adjustments to the plan as needed, always prioritizing their well-being.

