



Veterinary Medicine: Oncology



University of Illinois College of Veterinary Medicine

What is oncology?

-A branch of medicine that deals with prevention, diagnosis, and treatment of cancer.

-Our bodies are made up of millions of cells. These cells know how to divide and die on their own. Cancer is when cells that are not normal continue to divide and spread to other parts of the body and they don't die when they are supposed to.

-These cancer cells can clump together to form tumors and make animals sick.

Common Types of Cancers in Vet Med

- Bone Cancers:
 - Osteosarcoma
- Neuroendocrine Cancers:
 - Thyroid, Parathyroid, Adrenal, Pituitary, and Pancreatic neoplasia
- Mast Cell tumor
- Lymphoma
- Splenic Tumors
 - Hemangiosarcoma



Possible signs of neoplasia (cancer):

- Lumps/Bumps or discolored skin
- Sudden changes in weight
- Difficulty breathing/eating
- Visible mass/tumor
- Unexplained swelling, pain, or lameness (difficulty walking)

(Signs greatly vary depending on tissue involved and severity)



Ways doctors can diagnose cancer:

- Fine Needle Aspirate (FNA) of masses
 - Essentially “poke” the mass to obtain cells
 - Put cells onto a slide and stain them with special stains to find out if they are cancerous
- Bloodwork
 - Doctors look out for certain “red flags” that can indicate cancer
- Urinalysis
 - Examine the urine if suspicious for certain types of bladder/urinary cancers such as Transitional Cell Carcinoma (TCC)
- Radiographs (X-Rays)
 - Gain better visual of mass
 - Detect if cancer has spread to lungs (common in dogs)



Dog breeds prone to developing cancer:

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- Golden Retrievers
 - Bernese Mountain Dogs
 - Boxers: commonly get mast cell tumors
 - German Shepherds: commonly get hemangiosarcoma
 - Poodles
 - Rottweilers
 - Dobermans: females commonly get mammary cancer
 - Beagles



(Disclaimer: this is not a complete list, also if your dog is of a listed breed it doesn't automatically mean they will get cancer)

Myths about pets and cancer:

-Myth: Cancer is not treatable in animals.

-Truth: There are various treatment options aimed at addressing the tumor and/or supporting their quality of life.

-Myth: My pet will lose all their fur.

-Truth: This is relatively uncommon with the exception of a few breeds.

-Myth: My pet will be miserable during chemotherapy.

-Truth: Chemotherapy is well tolerated by pets. They react very differently to it than humans do!

-Myth: Pet cancer equates to a death sentence.

-Truth: Although it can cause death, and often does in older pets, it is very treatable.

Treatments

- Chemotherapy
- Radiation Therapy
 - Our brand new Linear Accelerator
- Immunotherapy