

## Does Your Pet Show This Sign of Aging? Be Aware, It Could Mean Cancer

Many older dogs struggle with it for reasons you'd easily guess. After all, everyone sort of expects certain issues in aging animals. But what if it was really a red flag for cancer — and a fast-acting one at that? Don't ignore or procrastinate on this one.

Reviewed by **Dr. Becker**

### STORY AT-A-GLANCE

- Chondrosarcoma, or CSA, is a fast-spreading, malignant bone cancer that is seen most often in older and large breed dogs
- Symptoms of CSA include pain and swelling in the affected area, lameness if a limb is involved and upper respiratory symptoms if the tumor is in the nasal cavity
- Traditional treatment for chondrosarcoma depends on the location of the tumor, but usually involves either surgery (amputation) or radiation therapy
- An integrative approach would also include nontoxic herbal protocols and a ketogenic diet (high-fat, moderate-protein and low-carb) to starve cancer cells of their preferred energy source, glucose

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Chondrosarcoma, also referred to as CSA, is a type of bone cancer that is malignant and aggressive. It originates in cartilage, which is the connective tissue found between bones and joints. This form of cancer often metastasizes (spreads) to other parts of the body, including the ribs.

Most chondrosarcomas occur in flat bones, especially bones in the nasal cavity and ribs. The tumors are also sometimes found in limbs.

Chondrosarcoma is the most common type of rib tumor found in dogs, and the second most prevalent primary tumor in dogs, representing 5% to 10% of all primary bone tumors. Older and **large breed dogs** are at higher risk for this type of cancer, which most commonly occurs in animals over the age of 8. Fortunately, it's quite rare in cats.

### Symptoms of Chondrosarcoma

Symptoms of CSA include:

- Pain in the affected area
- Swelling at the site of the tumor
- Lameness and/or fracture if the tumor affects a leg bone

- Sneezing, difficulty breathing, nasal discharge and/or nosebleed if the tumor is in the nasal cavity
- Other signs depending on where the cancer has spread

## Diagnosing Chondrosarcoma

In addition to a thorough physical exam, a complete blood count (CBC), serum biochemistry profile and urinalysis will be performed. Your veterinarian will also want to take tissue samples from local lymph nodes for analysis of cancer cells and evidence of your pet's immune system response.

X-rays of the affected area(s) may show the extent of tumor activity, and along with a CT scan and nuclear bone scans, can be helpful in assessing the stage and type of tumor. Bone scans may also indicate involvement of soft tissue and adjacent bones.

The most conclusive test in diagnosing chondrosarcoma is microscopic analysis of a biopsy of the growth itself.

## Traditional Treatment Options

Unfortunately, chondrosarcomas are very aggressive tumors. Traditionally, if the CSA affects a leg, amputation is recommended in situations where the cancer has not metastasized.

Traditional treatment for nasal tumors is radiation therapy, which is also sometimes used to prolong a pet's life when there are inoperable tumors or tumors in locations that make removal impossible.

If the cancer involves the ribs, sometimes a decision is made to remove the affected ribs and nearby lung tissue using a wide excision area in an effort to stop the spread of the tumor.

Most veterinarians want to see a pet with chondrosarcoma back every three months to check for recurrence or spread of the tumor. If your pet has had surgery, you'll need to limit his activities while he heals, which may mean pretty strict **crate rest**.

But the good news is that in cases where amputation has successfully removed the cancer and there's been no metastasis, most pets learn to compensate for their missing limb quickly and can go on to live a full and comfortable life.

Chemotherapy is typically not recommended for pets with CSA as it has not proven effective. Pain management is extremely important for animals with this type of cancer.

## Additional Recommendations

Integrative veterinarians use a variety of nontoxic herbal protocols to support patients with CSA, including Hoxsey Boneset formula, turmeric and medicinal mushrooms, as well as Chinese herbs and a variety of other nutraceuticals.

Dogs with chondrosarcoma should be put on a high-fat, moderate-protein and carb-free diet (no dry food whatsoever). This is what is known as a ketogenic diet that helps starve tumors and slow down the rate of metastasis.

A ketogenic diet combats cancer because cancer cells use glucose as a source of energy. The primary source of glucose is carbohydrates. Malignant cancer cells have very limited ability to use fat as an energy source, and they use protein for energy only after it has been processed by the liver to form glucose.

Starch (which rapidly turns into sugar) is abundant in pet foods, including “grain-free” kibble. Hidden sources of starch in your pet’s diet include potatoes, tapioca, lentils, chickpeas and pea products.

It’s impossible to produce dry food without a starch component, so it’s recommended to stop all dry foods when your pet is fighting cancer (and if you want to prevent cancer, eliminate dry food and the carcinogenic byproducts that occur during manufacturing).

KetoPet Sanctuary has been successfully utilizing a ketogenic diet to slow, stop and even reverse different types of cancer in rescue dogs. Their protocol includes a stringent 120-day plan that involves calorie restriction and a high-fat, carb-free and raw food diet. For more info, you can contact them at [\*\*info@ketopetsanctuary.com\*\*](mailto:info@ketopetsanctuary.com).

Another benefit of a ketogenic diet is it’s calorie-dense, which can be very helpful for pets who have lost a lot of weight due to their illness.

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