

# Osteosarcoma

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Osteosarcoma is the most common cancer that affects the bones and is seen most often in the leg bones. It accounts for up to 85% of cancers originating in the skeletal system and 75 to 85 % of the time it affects the limbs. It can be seen in dogs and rarely in cats. Osteosarcoma is also more commonly seen in the large and giant breed dogs such as Golden Retrievers and Great Danes. This form of cancer tends to affect middle aged to elderly dogs, but it can occur in dogs of any age. Intact dogs are more prone to developing osteosarcoma than altered animals. Osteosarcoma develops deep within the bone and becomes progressively more painful as it grows outward. The exact cause of osteosarcoma is unknown, however it is believed that there is a genetic component to it and it has been seen in animals with previous injuries or other skeletal abnormalities.

The most common symptoms are limping as well as swelling at the area affected. At times there can be a history of trauma before the owner notices that the dog is limping. The dog can be prone to frequent fractures because of the disruption of the bone. There can be visible pain because of the microfractures and/or fractures in the bone. Other signs that the owner may see are behavioral changes such as irritability and aggression, as well as loss of appetite, weight loss, whimpering, sleeplessness and not wanting to exercise. Other signs or symptoms vary depending on where the osteosarcoma is in the skeletal system.

To determine if osteosarcoma is the cause of your dog's lameness your veterinarian will want to take x-rays. If osteosarcoma is the cause of the lameness the x-ray will show a "spongy" appearance at the site of the cancer. They will also x-ray your dog's chest to see if the cancer has spread. Your veterinarian may then want to do biopsies of the area to confirm the diagnosis as well as blood work to check for any other health issues.



When treating osteosarcoma there are two components to address: the pain associated with the cancer and slowing the spread of the cancer. Your veterinarian will work with you to develop a pain management plan that best alleviates the pain and allows your pet to live more comfortably. There are several different drugs available to help with the pain and discomfort so your veterinarian may prescribe a combination of drugs to help. The best way to ensure that the pain is resolved is to amputate the leg. Removing the affected limb is not as handicapping as most people believe. Dogs that have a limb removed are able to run, play and live a normal life style once the post-surgical recovery time is over. Another option for pain control is radiotherapy. In this form of pain management the dog receives three

doses of radiation to the tumor site with the first two doses given one week apart and the third given two weeks later. While this form of pain management does not work in all cases the majority of owners notice an improvement in the use of that limb within the first three weeks and it typically lasts for about four months. The dog would then need to go through another round of radiation based on the stage of the cancer at that time. There is a surgical option called limb sparing surgeries where the cancerous area is removed and the bone is then stabilized. This option tends to have more complications and there are very few good candidates for the surgeries.



There are several different chemotherapy options to try and slow the spread of the cancer. The average life expectancy differs with each option. Your veterinarian will go over the different options or they may refer you to a specialty hospital for the chemotherapy. They will go over the drugs with you and help you to determine which is the best option for your dog. If you chose to not do chemotherapy the average life expectancy after diagnosis is four to five months. Depending on the stage of osteosarcoma and if there are any other underlying health conditions the average life expectancy is one year with some patients living for two years.

For information about osteosarcoma feel free to call us at (920) 668-6212 or email us at [info@cgvet.com](mailto:info@cgvet.com).