Vet's Corner - Cancer in Greyhounds

It has been estimated that cancer is the cause of death in 40%-45% of all dogs, greyhounds being no exception. Large breeds of dog, including greyhounds, are predisposed to developing bone cancer. While a complete list of all the cancers that could affect greyhounds is beyond the scope of this article, the following is a list of the most common types of cancer likely to be found in greyhounds.

Cancers can be PRIMARY, in that they arise in the particular tissue or organ, or SECONDARY in that they have spread from another primary site, either via the blood or lymphatics, (called 'metastasis') or by direct extension from an adjacent site-such tumours are called 'invasive'.

Osteosarcoma

This is a tumour of the bone and is arguably the commonest tumour found in greyhounds. A study in the UK found that osteosarcomas accounted for 50% of all tumours in greyhounds and 22% of all deaths. It is most commonly found in the long bones of the limbs – lower end of radius and top end of humerus in the front legs, and lower end of femur in the hind limbs. Greyhounds are usually over six years old before they develop osteosarcoma, which begins inside the bone and eventually breaks through to the outside, which is when pain begins.

Most osteosarcomas are highly malignant and tend to metastasise early, so that by the time the tumour makes itself apparent, it has already spread, which is why amputation alone is ineffective. Even combined with chemotherapy, the average survival time is only 12 months from diagnosis, as opposed to 4-5 months for amputation alone. While amputation does not save the dogs life, it does alleviate the pain associated with such tumours. If amputation is not done, pain relieving drugs such as non-steroidal anti-inflammatories, eg Rimadyl, Metacam, etc can be combined with codeine or tramadol to give reasonably effective pain relief.

Mast Cell Tumours

These are the commonest skin tumours in all breeds of dog. They generally occur as a single mass under the skin, and while they often appear quite innocuous, they can vary from being quite benign to highly malignant. A Fine Needle Aspirate (FNA) is used to biopsy such tumours in order to grade them. Grades 1 and 2 are relatively benign and surgical removal with a wide margin is often fully curative, while Grade 3 tumours are likely to metastasise to local lymph nodes and then to liver and spleen, with a survival time of six months or less from diagnosis.

Lymphosarcoma

This is probably the commonest malignant tumour. Certain breeds seem to have a high risk, eg Rottweilers, Golden Retrievers and Boxers. Greyhounds are not in the high risk category but it does occur. Dogs with lymphosarcoma apparently have a gene abnormality that promotes the development of malignancy.

Most affected dogs (84%) have multiple lymph node involvement and present with a number of painless enlarged lymph nodes. Some dogs may also have on-specific symptoms such as loss of appetite, listlessness, coughing and fever. These dogs generally have one or two tumours affecting the digestive tract and show signs of weight loss, vomiting and diarrhoea, sometimes with blood in the faeces. Treatment with anti-cancer drugs will often shrink these tumours and prolong the dog's life but is rarely completely curative.

Mammary Gland Tumours

Mammary glands are a common site of tumour development in older (>8 years) bitches. Bitches spayed before their first heat have only a 0.5% chance of developing mammary tumours, compared to 28% if spayed after their second heat. It would be highly unusual for a greyhound to be spayed early as it has a very adverse effect on their race performance. Multiple tumours can develop in the mammary glands, with roughly 50% being benign and 50% being malignant. The commonest malignant tumour is called an "adenocarcinoma" and they frequently metastasise to the lungs. Early surgical removal of affected glands is always recommended, with laboratory examination as well to determine level of malignancy and likelihood of recurrence. Adoptive owners should check their bitches regularly, every few months, by running their hand along the underside of the chest & abdomen, feeling for abnormal masses of tissue.



Your partner in Animal Health