



Brain Tumors

A tumor is an uncontrolled growth of cells within tissue. These abnormal cells create masses that destroy healthy tissue. A tumor in the brain will cause brain damage, resulting in serious neurologic symptoms.

Tumors that develop in the brain itself are called primary brain tumors, while tumors originating elsewhere in the body, but spreading to the brain are referred to as secondary. Four common types of *primary* brain tumors in pets are:

- **Meningiomas** arising from the coverings of the brain
- **Gliomas** arising from the support cells of the brain
- **Ependymomas** arising from the lining of the fluid-filled spaces of the brain
- **Choroid plexus tumors** arising from the cells that help produce spinal fluid

Signs

Brain tumors typically occur in pets older than five, and symptoms vary depending on where the tumor is located in the brain.

Signs of forebrain tumors include:

- Seizures
- Walking in circles
- Acute blindness
- Behavior changes

Signs of hindbrain tumors include:

- Changes in your pet's level of alertness
- Wobbly or uncoordinated walking
- Head tilt
- Abnormal darting of the eyes
- Weakness in the limbs
- Weakness on one side of the body

Causes

We don't truly know what causes brain tumors, but both genetic and environmental factors are thought to contribute to cancer development.

Examples of environmental factors include:

- Dietary
- Chemical
- Viral
- Traumatic
- Immune system

While it's possible for any pet to develop cancer, some breeds seem to have a higher genetic risk:

- French Bulldogs
- Boxers
- Boston Terriers
- Golden Retrievers
- Doberman Pinschers
- English Bulldogs

Diagnosis

High-field MRI is the best tool for diagnosing brain tumors. It allows a trained veterinary neurologist to clearly view the location, shape, and size of the tumor, providing a much better idea of what kind of tumor it is and how to best care for it. Because of the potential of a brain tumor spreading to other parts of the body, blood work, chest X-rays, and abdominal ultrasound are also recommended in some cases.

Treatment

While the diagnosis of a brain tumor might come as a shock, there are treatment options:

- Surgery
- Chemotherapy
- Radiation therapy

Surgery performed by an experienced veterinary neurologist is used to remove some or all of a tumor, while chemotherapy and radiation therapy are used to try to shrink tumors and slow their growth.

Another option is palliative care, using medications to help maintain quality of life for as long as possible.

Prognosis

Pets with brain tumors need ongoing care with a veterinary neurologist. Prognosis is variable, depending on the type and location of the tumor, as well as how early it is diagnosed and what treatment options are selected. However, it may be possible for treatment to increase the life expectancy associated with a primary brain tumor to several years, compared to weeks or months with palliative care. As with any cancer, the earlier it is diagnosed, the better the chances that treatment will be successful.



Learn more about
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