Tumour Group: Gliomas

WHO Grade: Grade III

Typical Age Range:
More common among men and women in their 30s to 50s, the mean is approximately 40 years of age. This tumour accounts for 2% of all brain tumours.

Description of Tumour:
The cells of these tumours are moderately fast-growing and less well-defined than a lower grade astrocytoma (Grade I or II), and are typically diagnosed in adults. Anaplastic astrocytomas can occur anywhere in the brain. They are sometimes found in the brainstem, making a histological diagnosis difficult. Like many brain tumour types, the exact cause of anaplastic astrocytoma is not known.

- Grows faster and more aggressively than Grade II astrocytomas and have an intrinsic tendency for malignant
- Tend to have tentacle-like projections that grow into surrounding tissue, making them difficult to completely remove during surgery
- Tumour cells are not uniform in appearance
- Invades neighbouring tissue
- Anaplastic astrocytomas are more common in men than women.
**Symptoms:**
Common symptoms include, but are not necessarily limited to:

- Changes in behavior
- Headaches
- Memory loss
- Seizures.

**Treatment/Standard of Care:**
Treatment depends on the location of the tumour and how far it has progressed. Surgery and radiation therapy, with chemotherapy during or following radiation, are the standard treatments for anaplastic astrocytomas. If surgery is not an option, then the physician may recommend radiation and/or chemotherapy.

**Prognosis:**
With standard treatment, median survival for adults with an anaplastic astrocytoma is approximately two to three years. However, the molecular profile of the tumour can help inform a longer or shorter prognosis.

Anaplastic astrocytoma has a strong tendency to progress to glioblastoma multiforme and the pace of progression is variable, but population-based studies suggest a mean time interval of approximately two years for progression.

For more details, please refer to braintumour.ca.