What is ependymoma?

Ependymoma is a rare tumor of the brain or spinal cord. It occurs in both adults and children. Ependymoma is a primary tumor, which means that it starts in either the brain or spine. The brain and spine are part of the central nervous system (CNS). Primary brain and spinal cord tumors are typically grouped by where the cells start.

The most common types of cells in the central nervous system are neurons and glial cells. Tumors from neurons are rare. Glial cells are the cells that support the brain. Tumors that occur from these cells are called gliomas.

**Glial cell subtypes of the CNS include:**
- Astrocytes
- Oligodendrocytes
- Ependymal cells

CNS brain tumors associated with all three types of glial cells are recognized by the World Health Organization as astrocytomas, oligodendrogliomas and ependymomas.

How do ependymomas form?

Scientists believe they develop from precursor cells to the ependymal cells. These cells line the ventricles (fluid-filled spaces in the brain) and the central canal of the spinal cord.

Ependymomas can occur anywhere in the CNS, including the brain or the spinal cord. The cause of ependymoma is not known.

Do they spread?

Sometimes, ependymoma tumor cells can spread in the cerebrospinal fluid (CSF). They may spread to one or multiple areas in the brain, spine, or both. Although it is rare, ependymoma can spread to other parts of the body. In general, tumors form where the tumor cells originate, such as the base of the brain and the bottom of the spinal cord.

Who does ependymoma affect?

Ependymomas can occur in both children and adults. Overall, ependymomas occur in males slightly more often than females. It also occurs in white people more often than those of other ethnicities.

Approximately 1,340 people per year are diagnosed with ependymoma in the U.S.

How often do ependymomas form in children?

- The third most common pediatric brain tumor
- The most common type of primary spinal cord tumor
- Approximately 250 children are diagnosed per year
- Most commonly occur in the brain

How often do ependymomas form in adults?

- Two percent of adult gliomas
- Approximately 1,100 adults are diagnosed per year
- Most commonly occur in the spinal cord
Ependymoma Awareness Day

May 3, 2020