Note: Benign and borderline intracranial and CNS tumors have a separate set of rules.

There are two types of cells that make up the nervous system: *neurons* and *neuroglia*. Neurons send and receive nerve messages. Neuroglia, otherwise known as *glial cells*, often surround the neurons. Glial cells play a supportive role by nourishing, protecting and supporting neurons. There are six kinds of glial cells; oligodendrocytes, astrocytes, ependymal cells, Schwann cells, microglia, and satellite cells. http://www.braintumorfoundation.org/tumors/primer.htm.

It is important to know that any of the glial tumors (Chart 1) can recur as a glioblastoma or glioblastoma multiforme.

Equivalent or Equal Terms (Terms that can be used interchangeably)

- Tumor, mass, lesion, neoplasm
- Type, subtype, variant

Definitions

Anaplastic Ependymomas (9392) are ependymal tumors that do not look like normal cells and grow more quickly than well-differentiated ependymal tumors

Astrocytoma: A tumor that begins in the brain or spinal cord in small, star-shaped cells called astrocytes. "Astrocytoma" is a term that applies to a group of neoplasms that can be divided into the following clinical-pathological components: Diffuse astrocytomas, anaplastic astrocytomas (grade III), and glioblastoma multiforme (grade IV).

Cerebellum: The part of the brain below the back of the cerebrum. It regulates balance, posture, movement, and muscle coordination.

Corpus Callosum: A large bundle of nerve fibers that connect the left and right cerebral hemispheres. In the lateral section, it looks a bit like a "C" on its side.

Ependymoblastoma (9302) is an embryonal tumor

Ependymoma: A glioma derived from relatively undifferentiated ependymal cells, comprising approximately 1–3% of all intracranial neoplasms. Ependymomas occur in all age groups and may originate from the lining of any of the ventricles or, more commonly, from the central canal of the spinal cord. Histologically, the neoplastic cells tend to be arranged radially around blood vessels, to which they are attached by means of fibrillary processes.

Frontal Lobe of the Cerebrum: The top, front region of each of the cerebral hemispheres. Used for reasoning, emotions, judgment, and voluntary movement.

Brain and CNS Terms and Definitions

Malignant Meninges, Brain, Spinal Cord, Cranial Nerves, Pituitary gland, Craniopharyngeal duct and Pineal gland Equivalent Terms, Definitions, Charts and Illustrations C700, C701, C709, C710-C719, C720-725, C728, C729, C751-C753 (Excludes lymphoma and leukemia – M9590-9989 and Kaposi sarcoma M9140)

Glioblastoma: A malignant rapidly growing Astrocytoma of the central nervous system. These neoplasms grow rapidly, invade extensively, and occur most frequently in the cerebrum of adults. Any glial tumor can recur as a glioblastoma or a glioblastoma multiforme (see Chart 1)

Glioma: Any neoplasm derived from one of the various types of cells that form the interstitial tissue of the brain, spinal cord, pineal gland, posterior pituitary gland, and retina. About half of all primary brain tumors and one-fifth of all primary spinal cord tumors form from glial cells. Gliomas tend to grow in the cerebral hemispheres, but may also occur in the brain stem, optic nerves, spinal cord, and cerebellum. Gliomas are divided into subgroups depending on the origin of the glial cells. The most common type of glioma is an astrocytoma.

Infratentorial: Tumors located in the posterior fossa, cerebellum, or fourth ventricle.

Medulla Oblongata: The lowest section of the brainstem (at the top end of the spinal cord). It controls automatic functions including heartbeat, breathing, etc.

Medulloblastoma: A tumor consisting of neoplastic cells that resemble the undifferentiated cells of the primitive medullary tube; medulloblastomas are usually located in the vermis of the cerebellum, and may be implanted discretely or coalescently on the surfaces of the cerebellum, brainstem, and spinal cord. They comprise approximately 3% of all intracranial neoplasms, and occur most frequently in children. A type of primitive neuroectodermal tumor.

Mixed glioma: The presence of at least two of the following cells/differentiation in a single tumor: astrocytic; oligodendroglial; ependymal

Occipital Lobe of the Cerebrum - the region at the back of each cerebral hemisphere that contains the centers of vision and reading ability (located at the back of the head).

Oligodendroglioma: A relatively rare, relatively slowly growing glioma derived from oligodendrocytes that occurs most frequently in the cerebrum of adults

Parietal Lobe of the Cerebrum: The middle lobe of each cerebral hemisphere between the frontal and occipital lobes. It contains important sensory centers (located at the upper rear of the head).

Pituitary Gland: A gland attached to the base of the brain that secretes hormones. It is located between the Pons and the Corpus Callosum, above the Medulla Oblongata. Synonym: Hypophysis.

PNET (**Primitive Neuroectodermal Tumor**): A group of malignant central nervous system tumors that includes medulloblastoma, pineoblastoma, ependymoblastoma, retinoblastoma, neuroblastoma, esthesioneuroblastoma, medulloepithelioma and ganglioneuroblastoma. Tumors are composed of primitive, undifferentiated embryonal cell lines and frequently classified according to anatomic location. Also known as central PNET or supratentorial PNET, depending on location of the tumor.

pPNET (**peripheral Primitive Neuroectodermal Tumor**): These tumors usually occur in the soft tissues of the chest, pelvis, and retroperitoneum and are rarely intracranial. There is known clinical and histological association between pPNET and both extraosseous Ewing sarcoma and peripheral neuroblastoma. Peripheral PNET is clinically and pathologically distinct from central PNET.

Satellite lesion or metastasis: Metastatic lesion within the immediate vicinity of the primary tumor. This is a metastasis, not a separate primary.

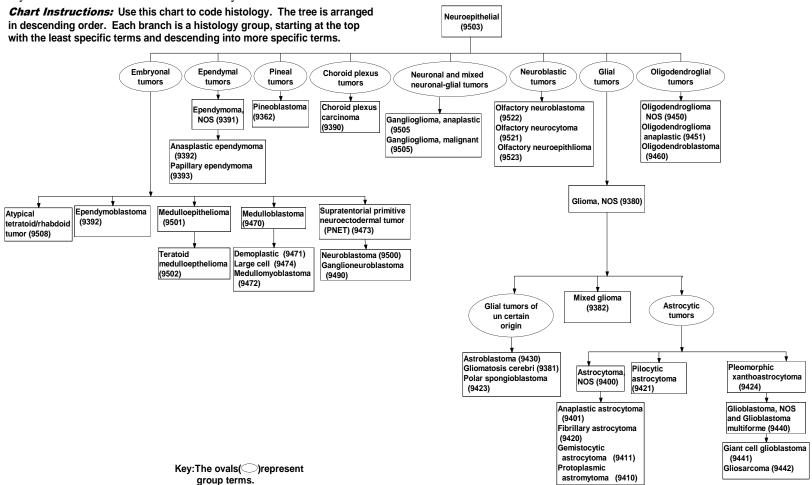
Spinal Cord - a thick bundle of nerve fibers that runs from the base of the brain to the hip area, running through the spine (vertebrae).

Supratentorial: Tumors located in the sellar or suprasellar region or in other areas of the cerebrum.

Temporal Lobe of the Cerebrum: The region at the lower side of each cerebral hemisphere; contains centers of hearing and memory (located at the sides of the head).

Chart 1 -Neuroepithelial Malignant Brain and Central Nervous System Tumors

Note: This chart is based on the *WHO Classification of Tumors* of the brain and central nervous system. The chart is **not** a complete listing of histologies that may occur in the brain or central nervous system.



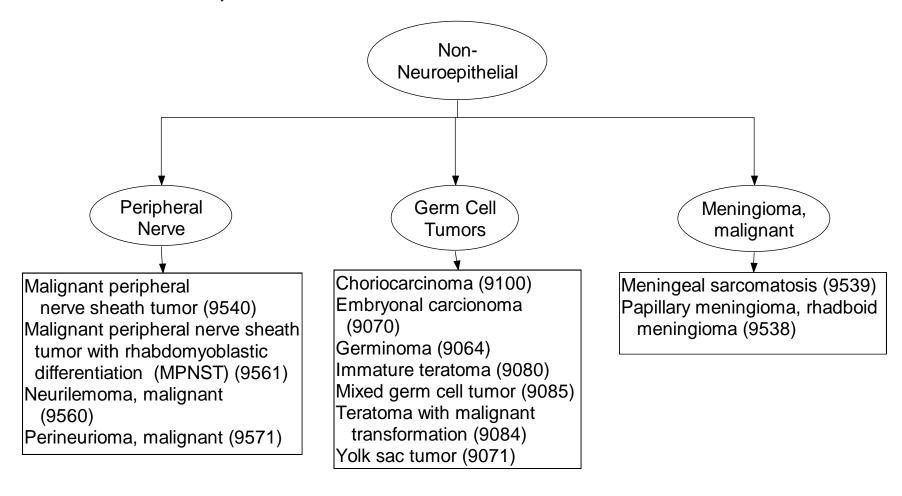
Malignant Meninges, Brain, Spinal Cord, Cranial Nerves, Pituitary gland, Craniopharyngeal duct and Pineal gland Equivalent Terms, Definitions, Charts and Illustrations C700, C701, C709, C710-C719, C720-725, C728, C729, C751-C753

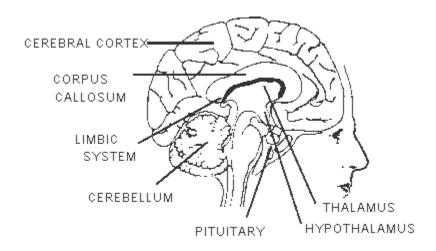
(Excludes lymphoma and leukemia – M9590-9989 and Kaposi sarcoma M9140)

Chart 2 – Non-neuroepithelial Malignant Brain and Central Nervous System Tumors

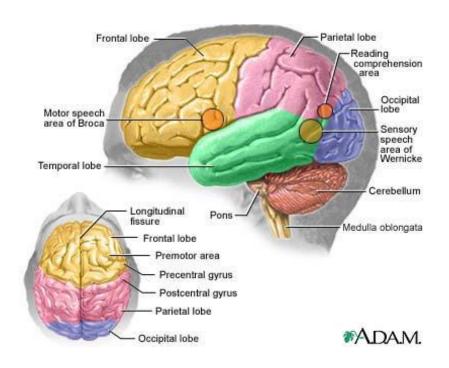
Chart Instructions: Use this chart to code histology. The tree is arranged in descending order. Each branch is a histology group, starting at the top with the least specific terms and descending into more specific terms.

Note: Chart 2 is based on the WHO Classification of Tumors of the brain and central nervous system. This chart is **not** a complete listing of histologies that may occur in the brain or central nervous system.

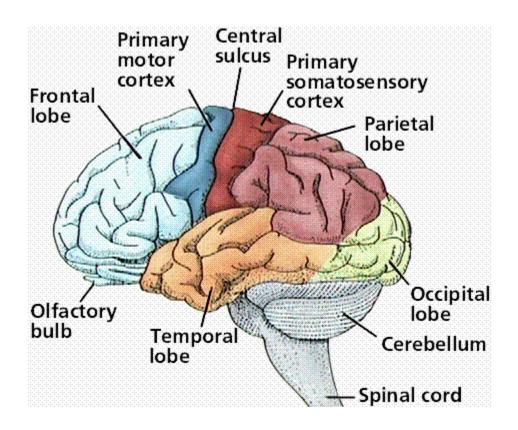




www.gender.org.uk/ about/07neur/74_brain.htm



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