Brain and Spinal Tumors

National Institute of Neurological Disorders and Stroke (NINDS)

Source

National Institute of Neurological Disorders and Stroke (NINDS). Brain and Spinal Tumors Information Page.

Tumors of the brain and spinal cord are abnormal growths of tissue found inside the skull or the bony spinal column. The brain and spinal cord are the primary components of the central nervous system (CNS). Benign tumors are noncancerous, and malignant tumors are cancerous. The CNS is housed within rigid, bony quarters (i.e., the skull and spinal column), so any abnormal growth, whether benign or malignant, can place pressure on sensitive tissues and impair function. Tumors that originate in the brain or spinal cord are called primary tumors. Most primary tumors are caused by out-of-control growth among cells that surround and support neuron, specific genetic disease (such as neurofibromatosis type 1 and tuberous sclerosis), or from exposure to radiation or cancer-causing chemicals. Metastatic, or secondary, tumors in the CNS are caused by cancer cells that break away from a primary tumor located in another region of the body. Tumors can place pressure on sensitive tissues and impair function. Symptoms of brain tumors include headaches, seizures, nausea and vomiting, poor vision or hearing, changes in behavior, unclear thinking, and unsteadiness. Spinal cord tumor symptoms include pain, numbness, and paralysis. Diagnosis is made after a neurological examination, special imaging techniques (computed tomography, and magnetic resonance imaging, positron emission tomography), laboratory tests, and a biopsy (in which a sample of tissue is taken from a suspected tumor and examined).