

Editorial Note on Brain Tumour

Ming Chang Chiang*

Department of Anesthesiology & Neurological Surgery, University of Washington, USA

Brain tumors are the growth of mass of abnormal cells in the brain. Brain tumors can be benign and malignant. Malignant brain tumors spread across the brain and are classified as secondary tumors. Brain tumors are classified into grades 1-4 based on the behaviour, how fast they grow and recurrence after treatment. Symptoms associated with brain tumor are seizures, persistent headaches, drowsiness, vomiting, nausea, memory, behavioural problems, paralysis etc. Types of Brain tumor include gliomas, meningiomas, pituitary adenomas, germ cell tumors, craniopharyngiomas etc.

A brain tumor occurs when abnormal cells form within the brain. There are two main types of tumors: cancerous (malignant) tumors and benign (non-cancerous) tumors. Cancerous tumors can be divided into primary tumors, which start within the brain, and secondary tumors, which most commonly have spread from tumors located outside the brain, known as brain metastasis tumors. All types of brain tumors may produce symptoms that vary depending on the part of the brain involved. These symptoms may include headaches, seizures, problems with vision, vomiting and mental changes. The headache is classically worse in the morning and goes away with vomiting. Other symptoms may include difficulty walking, speaking or with sensations. As the disease progresses, unconsciousness may occur.

The cause of most brain tumors is unknown. Uncommon risk factors include exposure to vinyl chloride, Epstein-Barr virus, ionizing radiation, and inherited syndromes such as neurofibromatosis, tuberous sclerosis, and von Hippel-Lindau Disease. Studies on mobile phone exposure have not shown a clear risk. The most common types of primary tumors in adults are meningiomas (usually benign) and astrocytomas such as glioblastomas. In children, the most common type is a malignant medulloblastoma. Diagnosis is usually by medical examination along with Computed Tomography (CT) or Magnetic Resonance Imaging (MRI). The result is then often confirmed by a biopsy. Based on the findings, the tumors are divided into different grades of severity.

Treatment may include some combination of surgery, radiation therapy and chemotherapy. If seizures occur, anticonvulsant medication may be needed. Dexamethasone and furosemide are medications that may be used to decrease swelling around the tumor. Some tumors grow gradually, requiring only monitoring and possibly needing no further intervention. Treatments that use a person's immune system are being studied. Outcome varies considerably depending on the type of tumor and how far it has spread at diagnosis. Although benign tumors only grow in one area, they may still be life-threatening due to their location. Glioblastomas usually have very poor outcomes, while meningiomas usually have good outcomes.

The signs and symptoms of brain tumors are broad. People may experience symptoms regardless of whether the tumor is benign (not cancerous) or cancerous. Primary and secondary brain tumors present with similar symptoms, depending on the location, size, and rate of growth of the tumor. For example, larger tumors in the frontal lobe can cause changes in the ability to think. However, a smaller tumor in an area such as Wernicke's area (small area responsible for language comprehension) can result in a greater loss of function.

Headaches as a result of raised intracranial pressure can be an early symptom of brain cancer. However, isolated headache without other symptoms is rare, and other symptoms including visual abnormalities may occur before headaches become common. Certain warning signs for headache exist which make the headache more likely to be associated with brain cancer. These are, as defined by the American Academy of Neurology: "abnormal neurological examination, headache worsened by Valsalva maneuver, headache causing awakening from sleep, new headache in the older population, progressively worsening headache, atypical headache features, or patients who do not fulfill the strict definition of migraine". Other associated signs are headaches that are worse in the morning or that subside after vomiting.

How to cite this article: Chiang, Ming Chang. "Editorial Note on Brain Tumour" 3(2020): e118.

* **Corresponding Author :** Chiang, Ming Chang *Department of Anesthesiology and Neurological Surgery, University of Washington, USA; Email: Johnhf@gmail.com*

Copyright: © 2020 Chiang, MC This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: December 04, 2020; **Accepted:** December 18, 2020; **Published:** December 25, 2020