Research & Reviews: Medical and Clinical Oncology

# A Brief Note On Neuro-Oncology

Kaleab Tegegne*

Department of Public Health, Haramaya University, Hawaasa, Ethiopia

Commentary

**Received:** 07-Feb-2022, Manuscript No. MCO-22-30121; **Editor assigned:** 10- Feb -2022, Pre QC No. MCO-22-30121 (PQ); **Reviewed:** 24- Feb -2022, QC No. MCO-22-30121; **Accepted:** 27- Feb -2022, Manuscript No. MCO-22-30121 (A); **Published:** 03-Mar-2022, DOI: 10.4172/Med & Clin Oncol.6.1.002

***For Correspondence:**
Kaleab Tegegne, Department of Public Health, Haramaya University, Hawaasa, Ethiopia

**E-mail: kaleabtesfaye35@gmail.com**

## Description

The field of medicine known as neurooncology deals with tumours of the brain and spinal cord. Nervous system. Cancers are common serious illnesses that can lead to death. These life-threatening neurological malignancies include astrocytomas, glioblastoma multiforme, glioma, pontine glioma, ependymoma, and brain stem tumours. Gliomas of the brain stem and high-grade astrocytoma are two of the most dangerous malignant brain tumours, with patients seldom lasting more than a few months without treatment. Chemotherapy and radiation can occasionally extend patient's life for few months.

Cancers of the nervous system can occur as primary tumor's or as secondary or metastatic tumors after cancer has spread to another part of the body. Primary tumors can strike at any age, although they most typically affect individuals in their prime. Most primary malignancies are more common in men than in women, although meningiomas are more common in women. By metastasis, compression, or direct invasion from another site of origin, secondary tumors can move to the nervous system.

Brain tumors can be caused by a variety of genetic disorders, including neurofibromatosis, tuberous sclerosis, and turner syndrome. Age, radiation exposure, and a weakened immune system owing to HIV/AIDS or the use of immunosuppressive medicines are all considered to raise the risk of brain cancer.

Neurooncology, imaging examinations are used to assess the tumor's location, size, and extent. The most often utilized procedures are Computed Tomography (CT) and Magnetic Resonance Imaging (MRI). Particle Emission

Tomography (PET), Myelography, and angiography are some of the other tests that may be utilized. A lumbar puncture and cerebrospinal fluid study may be necessary in some circumstances. Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) are two imaging techniques extensively utilized in neurooncology (MRI). Myelography, Positron Emission Tomography (PET), and diagnostic angiography are less routinely employed.

The examination of some primary tumor's, metastatic diseases, and cancer-related neurologic consequences requires lumbar puncture and cerebrospinal fluid investigation. For treatment planning and patient counseling, an accurate histologic diagnosis is essential. To achieve a histologic diagnosis, surgically acquired tissue is frequently necessary. Vitreous aspirate, cerebrospinal fluid cytology, or the presence of particular tumor markers in the CSF can all be used to provide a conclusive diagnosis for certain malignancies.

Chemotherapy, radiation, and surgery are the three primary therapeutic options for malignancies of the central nervous system. Radiotherapy is a common treatment for CNS malignancies, and it has been demonstrated to enhance survival in patients with both primary and metastatic tumors. Chemotherapy and corticosteroids are also frequently used to manage and lessen symptoms. Palliative and end-of-life care focuses on symptom treatment and increasing the quality of life for patients who still have some time left.

Radiotherapy is a common treatment for cancers of the central nervous system, and it has been shown to increase survival and quality of life in patients with a variety of primary and metastatic brain tumors.

Chemotherapy, or the use of medications to treat cancer, can help to keep many cancers under control for a long time. Even when tumors are extensive, such as testicular cancer or Hodgkin's disease, certain tumors can be treated. Chemotherapy should be administered and monitored under the supervision of someone who is familiar with the administration and monitoring of such drugs.

Almost all original central nervous system malignancies, as well as many metastatic tumors', need neurosurgical intervention. A biopsy is frequently used to confirm a histologic diagnosis. The role of surgery is determined by the type of tumor. Most individuals with extra-axial brain tumors can be treated with minimal residual neurologic damage using contemporary neurosurgical methods.