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Mini Review

Brain Tumour: The Deadliest Cancer

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ABSTRACT

Brain Tumour is growth of abnormal mass of cells which harms other neighbouring cells in the brain and leads to Brain Cancer in humans. Collection of neoplasms leads to tumour formation. Mostly, brain tumour arises from intracranial tissues and meninges. Tumours which are grown in brain itself are called Primary Brain Tumours whereas those which arouse in other parts of body but got into the brain are called Metastatic Brain Tumour. These Metastatic Tumours are mostly Malignant. Brain Tumour can be Benign (non-cancerous) or can be Malignant (cancerous). Some of the Benign Tumour are as follows: Chordomas, Craniopharyngiomas, Gangliocytomas, Meningiomas, Pineocytomas, Pituitary adenomas, Schwannomas and Acoustic neuromas. Malignant Tumour includes: Gliomas (the most deadly brain tumours).

Keywords: Benign Tumour; Gliomas; Metastatic Tumours

INTRODUCTION

What leads to Tumour Formation in the Brain?

Brain Tumour can be formed due to Mutations or defects in genes. Mutations in genes leads to formation of uncontrollable abnormal cells which divides into a large number and abruptly takes shape of tumour. Tumour causes self destruction of its own immune cells and leads to production of substances that blocks immune system so that it is unable to differentiate between normal cells and foreign body. Some of the other reasons are: Exposure to heavy amount of Ionizing Radiation which are mostly used in cancer treatment and when some genes in chromosome of cells are damaged. People at Risk: Brain tumour are more common in children and adults (mostly Male).

Traits and Indicator of brain tumor

Central Nervous System (CNS) of the body is made up of Brain and Spinal column. CNS is responsible for controlling all body functions, thus when brain tumour occurs it affects thought processing capacity, vision and many more.

Symptoms

Headaches (Occurs Often and worsens in morning and night); Behavior or personality changes; Seizures or convulsions (Uncontrollable Muscle Contractions); Confusion; Difficulty with balance or coordination; Dizziness; Trouble concentrating; Nausea and vomiting; Numbness, Weakness or Tingling (In one part or side of the body or face); Problems with Hearing, Vision or Speech, Seizures; Unusual sleepiness; Trouble with memory, Thinking, speaking or understanding language; Weakness or paralysis in one part or one side of the body; Gradual loss of sensation or movement in an arm or a leg.

Diagnosis and Cure

Diagnosis

Neurological examination: Checking Hearing, Vision, Reflexes as brain tumor has large impact on these body parts.

Imaging: Tests like Magnetic Resonance Imaging (MRI), Computerized Tomography (CT) Scan, and Positron Emission Tomography (PET) scan are used to easily diagnose brain tumor.

Biopsy: Piece of cells is removed to check whether tumor persist or not.

Analysis of CSF: Cerebrospinal fluid is tested to diagnose brain tumor.

Skull X-Ray: Skull fractures when brain tumor persist thus X-ray will help in diagnosing the tumor.

Angiography: Gives details about blood supply to tumor in the brain.

Cure

Surgery: Malignant Brain Tumours are removed using Surgery.

Minimally Invasive Surgery: Used for removing Cancerous tumours.

Radiation Therapy: X-rays are used for damaging tumour present in the brain.

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Chemotherapy: Drugs are injected to kill tumour or cancerous cells.

Radiosurgery: Gamma Knife and Linear Accelerator is used to treat tumours cells in the brain.

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