

# Brain Tumour Essentials

**JUNE 8**  
**World Brain**  
**Tumour Day**

## What is brain tumour?

A brain tumour is a growth of cells in the brain that multiplies in an abnormal, uncontrollable way. It can either be cancerous (malignant) or non-cancerous (benign).

- Benign brain tumours are low grade (grade 1 or 2), which means they grow slowly and are less likely to return after treatment.
- Malignant brain tumours are high grade (grade 3 or 4) and either start in the brain (primary tumours) or spread into the brain from elsewhere (secondary tumours); they are more likely to grow back after treatment.

## What are the symptoms of Brain tumour?



## What are the risk factors for Brain tumour?

- More common in children and older adults
- Exposure to solvents, pesticides, oil products, rubber, or vinyl chloride
- Exposure to infections, viruses, and allergens
- Electromagnetic fields
- Family history
- Ionizing radiation
- Head injury and seizures

## How to diagnose Brain tumour?

- **Neurologic Examination** shows how brain is working. Other names for this test include neuro signs, neuro checks, or neuro status. Doctor may check how pupils react to light and memory by how easily patient wake up.
- **CT scan or MRI** may show the size and location of any tumors.

- **A PET (Positron Emission Tomography) scan** uses a substance called tracer to show injuries or diseases inside the brain, such as tumours.
- **Tissue sampling/biopsy**
- **Electroencephalography (EEG)**

## How to treat brain tumour?

### ✓ **Surgery**

Surgery is the removal of the tumour and some surrounding healthy tissue during an operation. It is usually the first treatment used for a brain tumor and is often the only treatment needed for a low-grade brain tumor.

### ✓ **Chemotherapy**

Chemotherapy is the use of drugs to destroy cancer cells, usually by stopping the cancer cells' ability to grow and divide. The goal of chemotherapy can be to destroy cancer cells remaining after surgery, slow a tumour's growth, or reduce symptoms.

### ✓ **Radiation therapy**

Radiation therapy is the use of high-energy x-rays or other particles to destroy cancer cells. Doctors may use radiation therapy to slow or stop the growth of the tumor. It is typically given after surgery and possibly along with chemotherapy.

### ✓ **Targeted therapy**

Targeted therapy is a treatment that targets the tumour's specific genes, proteins, or the tissue environment that contributes to cancer growth and survival. This type of treatment blocks the growth and spread of tumor cells while limiting the damage to healthy cells.

### ✓ **Steroid medicine** helps reduce swelling in the head and body.

### ✓ **Anticonvulsant** medicine helps decrease or stop seizures.

### ✓ **Blood thinners** help prevent blood clots. Blood thinners make it more likely to bleed or bruise.

### ✓ **Alternating electric field therapy (tumour treating fields)**

It is the new non-invasive portable device for the treatment of recurrent glioblastoma. This device interferes with parts of a cell that are needed for the tumor cells to grow and spread.

## References-

- [www.nhs.uk](http://www.nhs.uk)
- [www.cancer.net](http://www.cancer.net)
- Micromedex care note