



Standard Treatment Workflow SUSPECTED BRAIN TUMORS

ICD-C71, D33

DEMOGRAPHICS

Brain tumors are seen with equal frequency in males and females

Astrocytoma is the commonest brain tumor in children followed by embryonal tumor

Meningioma is the commonest tumor in adults followed by glioma

CLINICAL PRESENTATION OF BRAIN TUMORS

SYMPTOMS



Recent onset headache, with or without vomiting

Gradual vision loss (unilateral/bilateral)

Seizures

Cranial nerve deficits (eg. hearing loss)

Focal deficit like monoparesis, hemiparesis

Increasing head-size (children with open fontanelle)

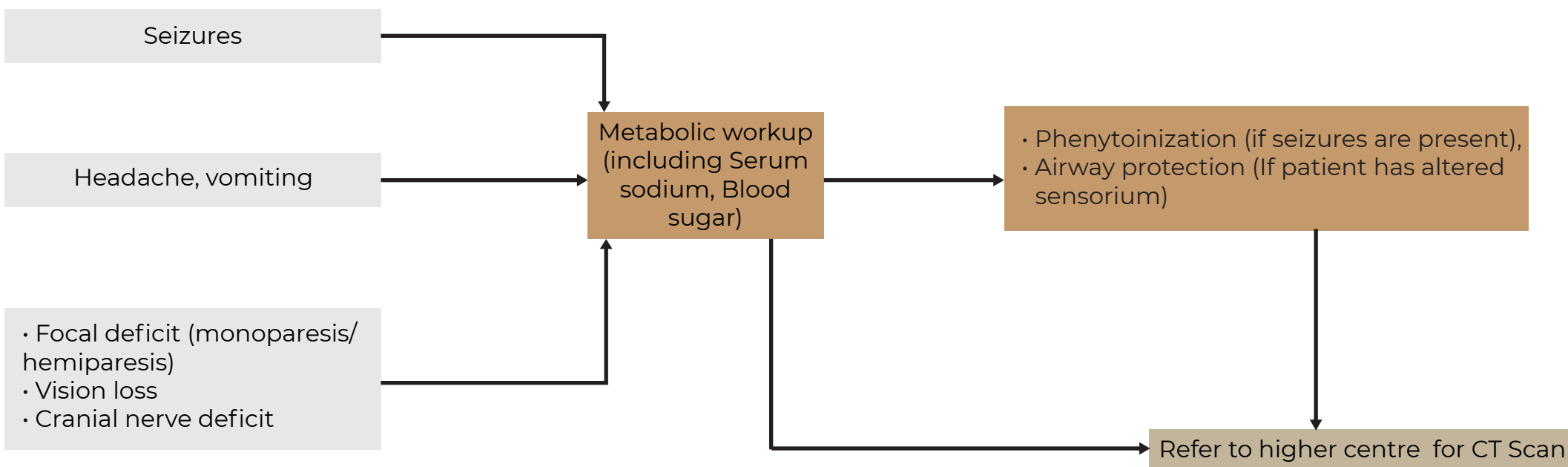
HIGH INDEX OF SUSPICION FOR BRAIN TUMOR WHEN PATIENT HAS:

- Adult onset seizures
- Progressive symptoms
- Focal neurological deficits
- Severe headache
- Recurrent vomitings
- Blurring of vision
- Drowsy or altered sensorium
- Recurrent seizures
- Pupillary asymmetry – Anisocoria
- Abnormal posturing
- Respiratory distress, abnormal breathing patterns
- Bradycardia and hypertension

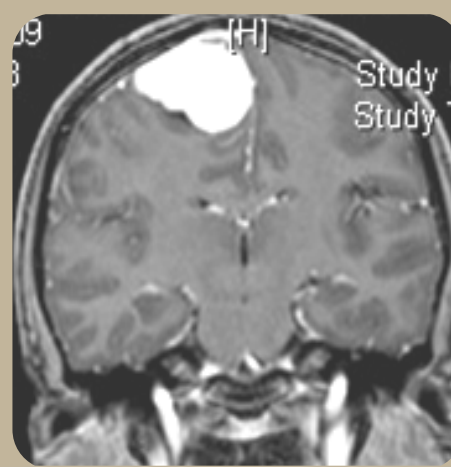
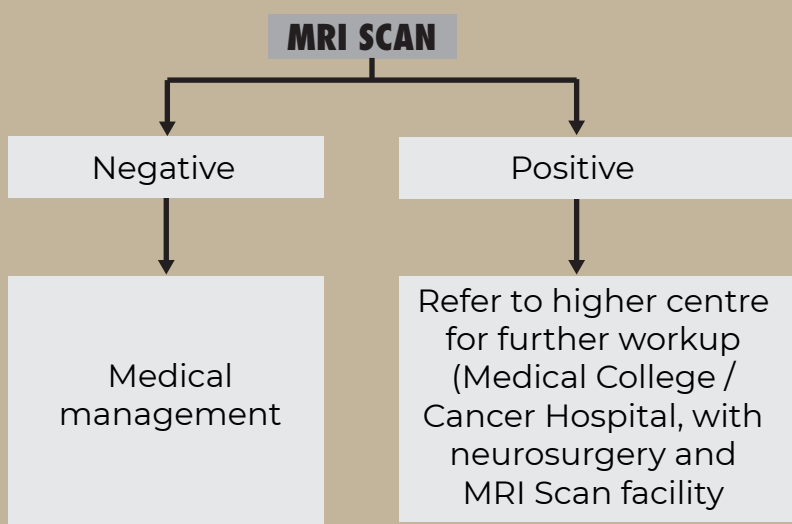
IF RED FLAG SIGNS PRESENT

- Give Inj Dexa 4mg IV
- Loading dose of antiepileptic to prevent seizure
- 200ml (to adult patients or as per weight to children) 20% mannitol IV over 30 minutes (only if systolic BP > 90 mmHg) and refer to higher centre immediately after stabilisation of ABC

AT PHC LEVEL



AT CENTRE WITH MRI SCAN FACILITY & NEUROSURGERY

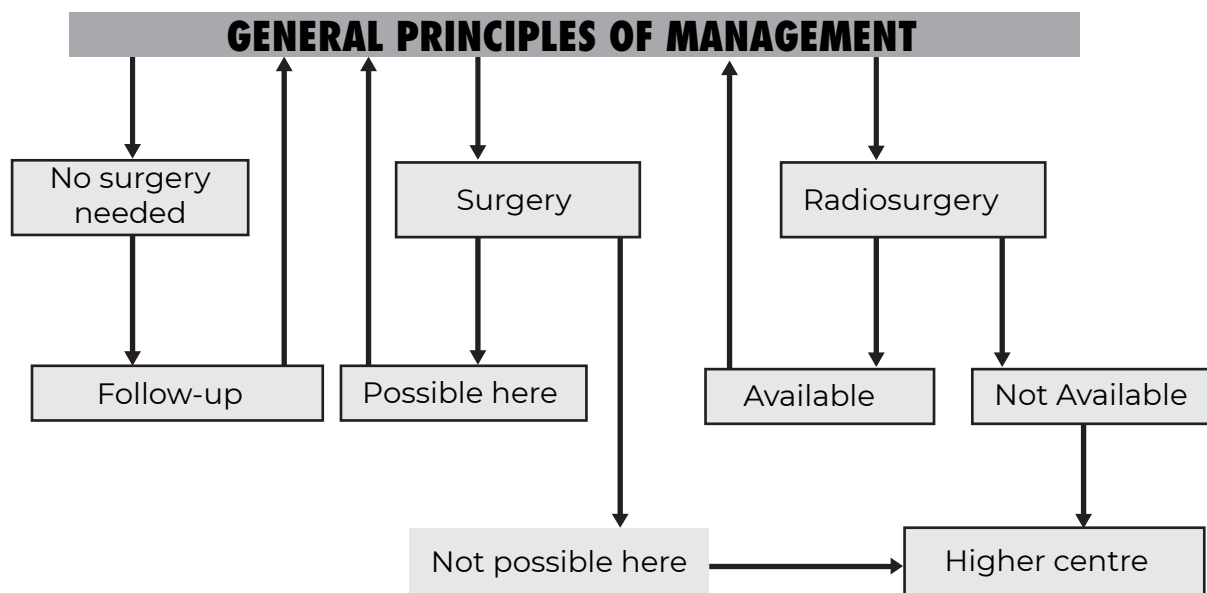


MRI image of Meningioma



MRI image of Glioblastoma

MEDICAL COLLEGE/CANCER HOSPITAL WITH NEUROSURGERY AND MRI SCAN FACILITY



REFERENCES

1. Jaiswal J, Shastry AH, Ramesh A, Chickabasaviah YT, Arimappamagan A, Santosh V. Spectrum of primary intracranial tumors at a tertiary care neurological institute: A hospital-based brain tumor registry. *Neurol India*. 2016 May-Jun;64(3):494-501. doi: 10.4103/0028-3886.181535. PMID: 27147159.
2. Dasgupta A, Gupta T, Jalali R. Indian data on central nervous tumors: A summary of published work. *South Asian J Cancer*. 2016 Jul-Sep;5(3):147-53. doi: 10.4103/2278-330X.187589. PMID: 27606302; PMCID: PMC4991137.

KEEP A HIGH THRESHOLD FOR INVASIVE PROCEDURES