

Central Nervous System Cancers

Anaplastic Glioma or Glioblastoma Multiforme

- Immediately post excision <72 hrs MRI
- Then once 2-6 weeks after RT
- Then every 2-3 months for 3 years
- Then annually

Astrocytoma or Oligodendroglioma (Low Grade)

Follow up after resection

- Initial post therapy MRI then
- MRI every 3-6 months for five years then annually

Adult Intracranial Ependymoma

- Post resection contrast enhanced MRI of Brain <72 hours after surgery, and contrast enhanced MRI of Spine (>2 weeks after surgery to avoid post surgical artifacts.)

MRI of the Brain (and MRI of the spine if initially positive)

- Every 3-4 months for 1 year
- Then every 4-6 months for year 2
- Then every 6 – 12 months

Adult Medulloblastoma and Supratentorial PNET (Primitive NeuroEctodermal Tumor)

- Post resection contrast enhanced MRI of Brain <72 hours after surgery, and contrast enhanced MRI of Spine (>2 weeks after surgery to avoid post surgical artifacts.)

Follow up

- Brain MRI every 3 months for 2 years, then every 6 months for 3 years, then annually
- Spine MRI every 6 months for 2 years, then annually for 3 years.

Primary Lymphoma of the CNS

Prior to treatment

- CT Chest, Abdomen and Pelvis OR PET/CT
- MRI of Spine if symptomatic or of CSF sampling was positive for lymphoma

Follow up

- Brain MRI: every 3 months for 2 years, then every 6 months for 3 years, and then annually for at least 5 years

Primary Spinal Cord Tumors

- Follow up MRI exams every 6 months for 2 years or if clinically indicated. (no reference available)

Meningioma

WHO grades 1 (benign meningioma) and 2 (atypical meningioma) or unresected

- MRI at 3, 6, then every 6 months for 5 years, then annually
- Who Grade 3 MRI every 3-6 months for 5 years, then annually for 5 years

Metastasis to the Spine

- Spinal MRI if there is severe rapidly increasing spine pain or Neurologic findings

Metastasis to the Brain on MRI exam

Limited to three or fewer lesions

Unknown Primary

- CT Chest, Abdomen and Pelvis, PET if nondiagnostic
- Then MRI of brain every 3 months for a year
- Then MRI of brain only for worsening clinical situation

Known Cancer elsewhere

- Then MRI of brain every 3 months for a year
- Then MRI of brain only for worsening clinical situation

More than three lesions on MRI

- Then MRI of brain every 3 months for a year
- Then MRI of brain only for worsening clinical situation

Metastasis to the Meninges suspected on clinical evaluation

- MRI brain and spine
- CSF Flow study (Nuclear or other) if intraventricular catheter is anticipated

References

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