Brain Metastasis Greater Than 3 Lesions

NOTE: Consider Clinical Trials as treatment options for eligible patients.

CLINICAL PRESENTATION

Greater than 3 possible metastatic lesions on MRI brain

Known history of cancer?

Yes

Syndromic lesion?

Yes

Systemic work-up to establish diagnosis, consider:
- Body FDG-PET
- CT chest, abdomen/pelvis
- Other imaging and diagnostic tests as indicated

No

Is lesion symptomatic or growth noted on serial brain imaging?

Yes

Consider stereotactic radiosurgery or open biopsy/resection

No

Whole brain radiation

PRIMAR YTREATMENT

See Page 2

Consider advance care planning at treatment disposition

Consider surgery to relieve mass effect

Gamma knife to be used as an option only within a clinical trial

Consider use of memantine to prevent cognitive decline associated with whole brain radiation therapy (WBRT)

1 Consider advance care planning at treatment disposition
2 Consider surgery to relieve mass effect
3 Gamma knife to be used as an option only within a clinical trial
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*This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.*

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### FOLLOW-UP

- MRI brain every 2-3 months for 1 year and as clinically indicated
- Neuropsychological evaluation
- Continue follow-up as clinically indicated

**RECURRENCE**

- Recurrent disease in brain
- Systemic disease progression, with limited systemic treatment options

**TREATMENT**

- Consider radiation **or** best supportive care

- Consider radiation **or** chemotherapy based on suspected primary cancer **or**
- Consider additional surgery for a new lesion when the originally treated lesions are stable (if not eligible for stereotactic radiosurgery)

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SUGGESTED READINGS


This practice algorithm is based on majority expert opinion of the Brain Metastasis Work Group Faculty at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

Olga Fleckenstein*
Marta Penas-Prado, MD (Neuro-Oncology)
Cheryl Martin, MS, ADN (Neurosurgery)
Barbara O’Brien, MD (Neuro-Oncology)
Ganesh Rao, MD (Neurosurgery)
Komal Shah, MD (Diagnostic Radiology-Neuro Imaging)
Erik Sulman, MD, PhD (Radiation Oncology)
Gloria Trowbridge, MSN, RN*
Jeffrey Wefel, PhD, ABPP (Neuropsychology)

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DEVELOPMENT CREDITS

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