Brain metastases Clinical Features

In 30% of patients with brain metastases (BM), neurological symptoms are the first clinical manifestation of systemic malignancy, referred to as BM from cancer of unknown primary site (BM-CUPS).

Presenting symptoms include headache (49%), focal weakness (30%), mental disturbances (32%), gait ataxia (21%), seizures (18%), speech difficulty (12%), visual disturbance (6%), sensory disturbance (6%), and limb ataxia (6%)¹⁾.

Neuropsychological testing demonstrates cognitive impairment in 65% of patients with brain metastases ^{2) 3)}, which might be a result of destruction or displacement of brain tissue by the expanding tumor, peritumoral edema leading to further disruption of surrounding white matter tracts, increased intracranial pressure, and/or vascular compromise.

To evaluate the clinical implications of status epilepticus in patients with metastases to the brain as well as associated demographic, clinical, EEG and radiographic features.

Retrospective chart review of 19 patients with metastases to the brain who subsequently developed status epilepticus.

Of the patients who developed status epilepticus only 36.8% had a prior history of seizures since diagnosis of brain metastases. Status epilepticus most commonly occurred in the setting of a new structural injury to the brain such as new metastases, increase in size of metastases or hemorrhage. 57.9% of patients had either refractory or super-refractory status epilepticus. Focal non-convulsive status epilepticus was the most common subtype occurring in 42.1% of patients. 31.6% of patients died within 30 days of the onset of status epilepticus.

Status epilepticus eventually resolved with treatment in all patients with brain metastases; however, it is associated with poor outcomes as nearly one-third was deceased within 30-days of onset. Nevertheless, no patients died during status epilepticus. Thus, status epilepticus may be indicative of an overall poor clinical status among patients with brain metastases ⁴.

Neuropsychological testing and biomarkers in the management of brain metastases

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Posner JB. Neurologic Complications of Cancer. Vol. 37. Philadelphia: Davis FA; 1995. Paraneoplastic Syndromes; p. 311.

Chang EL, et al. A pilot study of neurocognitive function in patients with one to three new brain metastases initially treated with stereotactic radiosurgery alone. Neurosurgery. 2007;60:277–283.

Mehta MP, et al. Survival and neurologic outcomes in a randomized trial of motexafin gadolinium and

whole-brain radiation therapy in brain metastases. J Clin Oncol. 2003;21:2529–2536

Fox J, Ajinkya S, Greenblatt A, Houston P, Lekoubou A, Lindhorst S, Cachia D, Olar A, Kutluay E. Clinical characteristics, EEG findings and implications of status epilepticus in patients with brain metastases. J Neurol Sci. 2019 Oct 16;407:116538. doi: 10.1016/j.jns.2019.116538. [Epub ahead of print] PubMed PMID: 31644990.

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