

Journal Article



Rehabilitation in primary and metastatic brain tumours

Impact of functional outcomes on survival

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Abstract

Objective Patients with brain tumours have major disabilities and guarded prognosis but may benefit from inpatient rehabilitation. The objectives were to compare functional outcomes in patients with glioblastoma multiforme (GBM), brain metastases and other brain tumours, and to determine predictors of survival.

Methods Demographic, clinical, functional, and survival data were collected for 63 patients. Kaplan-Meier and Cox regression were used for survival analyses.

Results Functional Independence Measure (FIM™) scores improved from admission to discharge for patients with GBM, brain metastases and other tumours. Estimated median survival was 141 days for brain metastases, 214 days for GBM and 439 days for other tumours. Low admission dexamethasone dose and high FIM™ gain predicted better survival in GBM. For brain metastases, high FIM™ gain, low dexamethasone dose and no organ metastases were positive prognostic factors.

Conclusions Patients with primary and metastatic brain tumours achieved functional gains after rehabilitation. High functional improvement is a significant predictor of longer survival in brain metastases and GBM. This study has implications for rehabilitation in the post-acute management of patients who have disabilities due to brain tumours.

Key words functional independence measure - neurorehabilitation - prognosis - brain tumour - metastasis

Function scores noted are based on data collected using the FIM™ instrument. The 18-

item FIM™ Instrument is the property of the Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc.

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References secured to subscribers.

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