Brain Tumor Clinical Features

Brain tumor-related epilepsy

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Neuropsychiatric disorder

Very few studies have utilized specific criteria to assess mental disorders in brain tumor patients, and from them, they are mainly descriptive.

Depression as well as anxious and OCD psychopathology were shown to be prevalent signs among patients with brain tumor. Diagnosis of symptoms were totally based on DSM-IV criteria and these disorders and the percentiles don't seem to be related to each other. Due to high variability of tumor stages, statistical analysis of whether the mentioned psychiatric symptoms get worsen at the later stages of the tumor genesis was not feasible. Although not measured directly, psychiatric symptoms seem to get worsen at the later stages of the brain tumor. The associated factors are tumor location, patient's premorbid psychiatric status, cognitive symptoms and adaptive or maladaptive response to stress [1].

Cognitive symptoms

Cognitive symptoms occur in almost all patients with brain tumors at varying points in the disease course. Deficits in neurocognitive function may be caused by the tumor itself, treatment (surgery, radiation, or chemotherapy), or other complicating factors (e.g., seizures, fatigue, mood disturbance) and can have a profound effect on functional independence and quality of life. Assessment of neurocognitive function is an important part of comprehensive care of patients with brain tumors. In the neuro-oncology clinic, assessment may include cognitive screening tools and inquiry into subjective cognitive function. Neuropsychological assessment is an important adjunct to identify cognitive symptoms and can be used as an opportunity to intervene through transformative feedback and treatment planning. Preventative measures can be taken to reduce cognitive side effects of treatment, such as awake craniotomies with intraoperative mapping during neurosurgery or prophylactic measures during radiation therapy (e.g., hippocampal avoidance, neuroprotectant treatment with memantine). Rehabilitative therapies, including cognitive rehabilitation and computerized cognitive exercise, are options for managing cognitive problems in an individualized manner. Pharmacotherapy, including use of stimulant medications and acetylcholinesterase inhibitors, has shown benefits for patients with brain tumors when tailored to an individual's cognitive profile. Identification and management of co-occurring issues, such as sleep disturbance, fatigue, and depression, can also improve neurocognitive function. There are promising therapies under development that may provide new options for treatment in the future. Integrating careful assessment and treatment of cognition throughout the disease course for patients with brain tumors can improve functional outcomes and quality of life [2].

1)

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2)
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