

AB068. Psychiatric disorder in central nervous system tumor patients and its related factors

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Background: Patients of central nervous system (CNS) tumors have a potential to develop psychiatric disorder. These may present resulting from tumor mass, edema, or patient's failure to adapt to their illness and treatment. The presence of psychiatric disorders may cause disability, decreased daily functioning, reduced quality of life, and even death. In order to provide adequate treatment to patients with CNS tumors, it's important to evaluate the type of psychiatric disorder in patients with spinal and brain tumors. This study aimed to investigate the prevalence of psychiatric disorder dan related factors that exist in patients with brain and spinal tumors.

Methods: In a study conducted at Cipto Mangunkusumo General Hospital from January to December 2023, factors associated with psychiatric disorders in patients with CNS tumors were investigated. The analysis included a total of 161 subjects from inpatient settings. In depth interview was utilized to assess psychiatric disorder. Data analyses were carried out using the Chi-square and Fisher's exact test to assess the relationship between locations of tumor, neurological deficits, and psychiatric disorders.

Results: There were 161 subjects with mean age of 48.86 ± 13.13 years, mostly women (59.0%). Patients with spinal tumor have more psychiatric disorders compared to their counterpart with intracranial tumor (79.1% and 76.3% respectively), while the most common psychiatric disorder was adjustment disorder. There is no significant

relationship between tumor location and psychiatric disorder. In both patients with intracranial and spinal tumors, the most common neurological deficit was cancer pain (88.2%). However, bivariate analysis showed that among the neurological deficits found in the CNS tumor patients, dysphagia ($P=0.02$) and incontinence ($P=0.02$) have significant relationship with depression, while pain ($P=0.02$) and cognitive dysfunction ($P=0.01$) have significant relationship with adjustment disorder. It also showed that pain ($P<0.001$), cognitive dysfunction ($P=0.002$), and seizure ($P=0.03$) have significant relationship with organic mental disorder.

Conclusions: Dysphagia, incontinence, pain, cognitive dysfunction, and seizure were identified as risk factors for psychiatric disorders in intracranial and spinal tumor patients. The finding underscores the importance of screening and comprehensive psychiatric evaluations in patients with CNS tumors, as psychiatric symptoms may significantly impact their quality of life and treatment outcomes.

Keywords: Central nervous system tumors (CNS tumors); psychiatric disorders; predisposing factor

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Footnote

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://cco.amegroups.com/article/view/10.21037/cco-24-ab068/coif>). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013) and approved by the Ethics Committee of the Faculty of Medicine, University of Indonesia - Cipto Mangunkusumo Hospital (No. KET-939/UN2.F1/ETIK/PPM.00.02/2023). Because of the retrospective nature of the research, the requirement for informed consent was waived.

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