

# Intracranial Tumors

## A nurse-led intervention for educating and supporting patients and their caregivers

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**BACKGROUND:** Behavioral symptoms among postoperative patients with intracranial tumors and distress among caregivers are common.

**OBJECTIVES:** This article aimed to assess the effectiveness of a brief nurse-led intervention on behavioral symptoms of postoperative patients with intracranial tumors and distress of their caregivers.

**METHODS:** A randomized controlled trial was conducted on 80 patients with intracranial tumors and their family caregivers in a tertiary care institute in India. A brief nurse-led intervention was provided in the form of individual counseling, and a pamphlet was given to patients and caregivers in the experimental group at the time of discharge. Behavioral symptoms of patients and distress of caregivers were assessed.

**FINDINGS:** Patients in the experimental group had significantly fewer behavioral symptoms and less severity of behavioral symptoms as compared to the control group. Caregivers in the experimental group had significantly less severity of distress as compared to the control group.

### KEYWORDS

behavioral symptoms; intracranial tumor; nurse-led intervention

### DIGITAL OBJECT IDENTIFIER

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**PATIENTS DIAGNOSED WITH INTRACRANIAL TUMORS** have physical, psychosocial, and emotional symptoms that affect their behavior and cause distress for their caregivers (Dhandapani, Gupta, Mohanty, Gupta, & Dhandapani, 2016, 2017). Behavioral symptoms of the patients result in distress among caregivers because of their symbiotic relationship and affect the functional, psychological, and social well-being of patients and caregivers (Andrewes, Drummond, Rosenthal, Bucknill, & Andrewes, 2013). An intracranial tumor is an abnormal growth of tissues in the brain or adjacent structures within the cranial cavity and is diagnosed by an imaging study.

Behavioral symptoms in postoperative patients with intracranial tumors may be because of the effect of the tumor; the location, size, or treatment; or the effect of increased intracranial pressure (Dhandapani, Dhandapani, Agarwal, & Mahapatra, 2016; Dutta et al., 2017; National Brain Tumor Society, n.d.). Behavioral symptoms include irritability, aggression, anxiety, and depression (Dhandapani et al., 2017). Because providers first address the patient's physical symptoms from an intracranial tumor, behavioral symptoms from intracranial tumors may be ignored by providers and caregivers (Dhandapani, Gupta, et al., 2016). Behavioral symptoms can affect patients' ability to be involved in clinical decision making and lead to poor survival rates (Dhandapani, Gupta, et al., 2016; Rooney & Grant, 2010).

Dhandapani, Gupta, et al. (2016) reported that about 60%–90% of patients with intracranial tumors face cognitive impairment, along with emotional and behavioral changes. Depression is common in patients with intracranial tumors, and they experience a sense of irritability, hopelessness, concentration deficits, apathy, withdrawal, mood swings, and a desire to harm themselves (Dhandapani, Gupta, et al., 2016; Rooney & Grant, 2010). Zwinkels et al. (2015) reported that the prevalence rate of changes in personality and behavior in patients with gliomas varied from 8%–67% and was reported to be 100% in patients with bilateral gliomas. According to Boele, Rooney, Grant, and Klein (2015), neurologic, cognitive, and psychiatric symptoms affect the daily life of patients with gliomas. These symptoms are common and associated with multiple factors.

Untreated behavioral and cognitive changes after intracranial tumors can result in challenging behaviors with limited treatment approaches