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LETTER TO THE EDITOR

Beyond surgery: Overcoming postoperative depression in cancer patients

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Abstract

Depression is a common occurrence among cancer patients, and it significantly impacts their clinical outcomes and quality of life, with a high incidence during anti-tumor treatment or after surgery. The association between surgery and depression is the result of the interaction of various factors, including physiological, psychological, and social factors, all of which are intertwined and make patients susceptible to depression after surgical treatment. Postoperative depression has a significant negative impact on many aspects of cancer patients, and it requires timely identification and intervention to improve the overall outcome.

Key Words: Depression; Surgery; Tumor; Anti-tumor therapy

Core Tip: Postoperative depression has a series of negative effects on the recovery, quality of life, and subsequent anti-tumor therapy in cancer patients. We should evaluate patients who experience depression or have a tendency toward depression following surgery in a timely manner. Surgeons should use a combination of approaches to comprehensively assess the patient's psychiatric status and take appropriate measures to help them deal with depression, leading to improved clinical outcomes.

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TO THE EDITOR

We reviewed the article titled "Depression and anxiety among cancer patients visiting a tertiary care cancer hospital", published in the *World Journal of Psychiatry*[1]. The investigators conducted a cross-sectional study of 220 cancer patients to assess the prevalence of depression and anxiety. In this study, 124 (56.4%) of them were diagnosed with mild depression, 70 (31.8%) with moderate depression, and 3 (1.4%) with severe depression. Depression is a common psychiatric disorder of cancer patients and it has a major negative impact. Many studies have shown that a high percentage of patients with tumors develop depression after surgery or during subsequent anti-tumor therapy[1-3].

Postoperative depression manifests as a series of psychological symptoms such as low mood, anxiety, negative thinking, and a loss of interest or pleasure that occurs in patients after surgical treatment[4]. There is a close relationship between surgery and depression, and the underlying reasons mainly include the following: (1) Patients experience pain, fear, anxiety, and other discomfort during the perioperative period, which may cause or worsen depressive symptoms; (2) Changes may occur in the patient's neuroendocrine system, such as increased cortisol level, which are associated with the occurrence of postoperative depression[5]; (3) Patients may have strong fears and are anxious about the consequences of malignant disease and surgery; and (4) The surgical treatment and subsequent management are costly, which may lead to financial difficulties for patients with cancer, and the impact of the postoperative recovery process on their work could further exacerbate this burden[6]. The association between surgery and depression is a result of the interplay of various physiological, psychological, and social factors that combine to make patients susceptible to depression after surgical treatment.

Postoperative depression has a series of negative impacts. Depressive symptoms can lead to a lack of motivation to engage in recovery activities after surgery, thereby prolonging the recovery time, and possibly also affecting the function of the immune system, making patients more susceptible to infection and complications. Depressive symptoms and physical discomfort during recovery interact with each other in a vicious cycle. Moreover, the depressive state may influence the patient's attitude and compliance toward anti-tumor treatment. Although there are significant individual differences among cancer patients, we have observed numerous successful cases in clinical practice. For example, advanced-stage cancer patients who did not have the opportunity for surgery but they did not give up and actively received antitumor treatment, subsequently experienced a continuous reduction of the tumor size that allowed surgical resection. Additionally, many patients with large liver cancers who actively underwent a combination of multi-scheme anti-tumor treatments after surgery, experienced postoperative recurrence rates that were not significantly different from the 2-year recurrence rates of patients with small tumors (< 5 cm). Our clinical experience also indicates that many patients experiencing depression doubt or refuse treatment and medication, leading to discontinuation of treatment and poor survival outcomes. Briefly, postoperative depression has a significant negative impact on many aspects of cancer patients, and it requires timely identification and intervention to improve overall outcome and quality of life.

Preventive or interventive strategies to reduce the impact of postoperative depression are important. Multiple methods are available to a surgeon to assess a patient with depression or depressive tendencies. Firstly, we should closely observe the patient's behavior, words, and emotional expression and pay attention to signs such as low mood, insomnia, change in appetite, obvious negative emotions, or other depressive tendencies preoperatively and postoperatively[7,8]. Standard psychological questionnaires or scales, such as the Generalized Anxiety Disorder Scale (GAD-7) and the Patient Health Questionnaire (PHQ-9), should be used when necessary[9]. The establishment of multidisciplinary teams of surgeons, anesthesiologists, and nurses helps to ensure adequate psychological assessment. Special attention must be given to patients who have a history of psychiatric disease, preoperative anxiety, complex surgery, or poor prognosis, as they are at higher risk for postoperative depression. When assessing these patients for depression, it is recommended to collaborate with professional psychologists or counselors who could provide deeper psychological evaluation. Use of these methods could comprehensively evaluate a patient's psychiatric status and take appropriate measures to help them deal with depressive emotions and improve clinical outcomes.

The success of intervention strategies requires building good communication and trusting relationships with patients and listening to them and their inner feelings. A healthy diet, moderate physical activity, restful sleep, and effective pain management are some of the things that can help improve depressive symptoms. Emotional support and encouragement from family and friends are also critical and can help patients participate in family and social activities[10]. Individualized interventions should be provided by a psychologist, if needed. The alleviation of postoperative depression or anxiety can be achieved with a variety of pharmacologic agents, such as selective 5-hydroxytryptamine reuptake inhibitors and benzodiazepines[11]. When using these medications, the patient's overall health and specific situation, including drug side effects and interactions need to be considered. Nonpharmacological therapies that help alleviate postoperative depression include cognitive behavioral therapy, music therapy, and social support[7,12]. In summary, it is essential to increase attention to and research on postoperative depression in the future. Effective identification and intervention should include multiple settings to provide comprehensive psychological support that improves long-term survival and the quality of life.

FOOTNOTES

Author contributions: Song SM, Yue HM, and Liu R designed the study; Wang X searched the literature; Song SM and Liu R wrote the manuscript and approved the final manuscript.

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