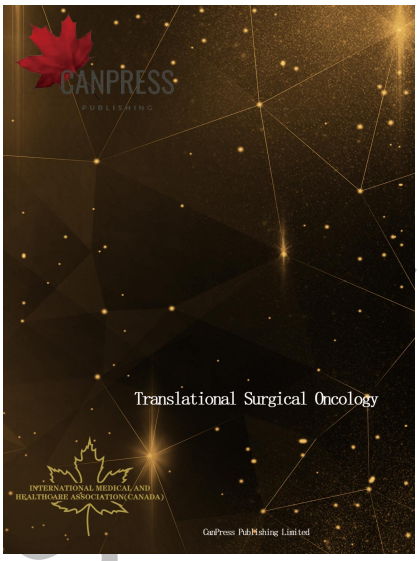
Oncology emergencies：call for more attention



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Oncology emergencies usually refer to various life-threatening complications that result from the development or treatment of malignant tumors in patients[1]. Along with the continuous improvement of oncotherapy, the survival time of patients with malignant tumors is greatly prolonged, and oncology emergencies are also increasing rapidly[2]. Oncology emergencies can be induced by the malignant tumor itself or by anti-tumor treatment, and it may lead to serious consequences even death if not treated in time.

Emergencies caused by the malignant tumor include emergencies caused by paraneoplastic syndromes or structural complications caused by the compression, expansion, or mass of tumors[3,4]. Most paraneoplastic syndromes are mediated by endocrine factors, such as the syndrome of inappropriate secretion of antidiuretic hormone (SIADH), hypercalcemia, ectopic adrenocorticotropic hormone (ACTH) syndrome, and carcinoid syndrome. Structural complications can involve various systems, including deep vein thrombosis (DVT), superior vena cava obstruction syndrome (SVCOS), spinal cord compression, intracranial hypertension, and the obstruction of various natural cavities. These emergencies can either occur after the diagnosis of the tumor, or appear as the initial symptom, and often indicate that the malignant tumor has already progressed to the middle and late stage, thus, the opportunity for early treatment is missed.

At present, the commonly used oncology treatment includes cytotoxic chemotherapy, radiotherapy, and targeted therapy. Emergencies caused by cytotoxic chemotherapy and radiotherapy include tumor lysis syndrome, neutropenic fever, severe anemia, infection and vomiting[5,6]. Targeted therapies include cell-based therapies and antibody-based therapies, which are associated with immune-related adverse events, QTc prolongation, and sinusoidal obstruction syndrome and angiogenesis-related toxic effects[7,8]. Emergencies during oncology treatment are often predictable, and the harm to patients can usually be effectively controlled.

For most oncology emergencies, there is often a clear history of malignant tumor, and the diagnosis and treatment are often not difficult. However, about 15% of patients with malignant tumors are treated as initial emergencies, such as hemoptysis, acute intestinal obstruction and jaundice, which require better ability of emergency physicians for the diagnosis and differential diagnosis. Therefore, it has been an urgent problem to strengthen the training of oncologic emergencies for emergency physicians, optimize the emergency driven treatment coordination, and further improve the treatment transition between emergency and oncologic medical and surgical residents.

Competing interests

The author declares no competing interests.

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