



ROLE OF NURSES IN ONCOLOGIC EMERGENCIES

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RECONNECTING for Our Future in Cancer Care

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CONTENT OUTLINE

- Overview of oncologic emergencies
- Definition of oncologic emergencies
- Categories and classification of oncologic emergencies
- Role of nurses in oncologic emergencies



Overview of oncologic emergencies (OE)



- The most distressing challenges along the treatment journey is the possibility of experiencing an oncologic emergency
- Potentially life threatening, appearing quickly & without warning & heralding progressive disease.
- Present significant challenges to healthcare providers and caregivers.
 - ❑ Oncology nurses are crucial to recognizing and managing the signs and symptoms of oncologic emergencies.

Understanding Oncologic emergencies

- First step to mitigating potentially deadly complications in practice.
- Conditions vary greatly between patients, disease types, and stages of treatment
- Developing the knowledge base to recognize the signs and symptoms is a key to prevent serious problems.



Definition



Any acute possible morbid or life-threatening events in patients with cancer either because of the malignancy or because of their treatment. (Jafari, Tavirani, Salimi et al., 2020)

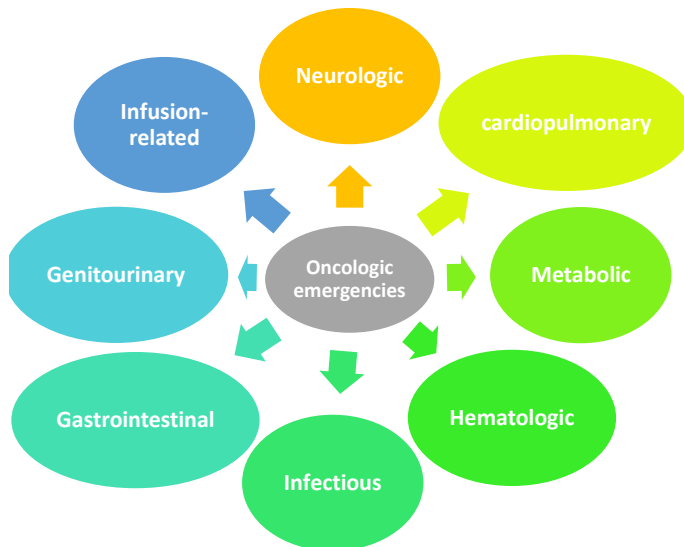


These events may occur at any time during malignancy, from symptoms present to end-stage disease. (Jafari, Tavirani, Salimi et al., 2020)



The signs and symptoms of OEs are often common problems experienced by individuals with cancer such as nausea, pain, headache, and fever.

- OEs can be grouped into 8 categories
- Classified as metabolic, structural, or treatment-related emergencies



Neurologic
Spinal cord compression
Intracranial malignancy
Seizures
Cardiopulmonary
Superior vena cava syndrome
Cardiac tamponade
Massive hemoptysis
Airway obstruction
Large pleural effusion
Metabolic
Hypercalcemia
Tumor lysis syndrome
Hyponatremia
Hypoglycemia
Adrenal failure
Hematologic
Thrombocytopenia
Thrombosis
Increased viscosity syndromes
Infectious
Neutropenic sepsis
Vascular access device-related sepsis
Gastrointestinal
Obstruction
Hemorrhage
Genitourinary
Obstruction
Hemorrhage
Infusion-related
Allergic reactions
Extravasation

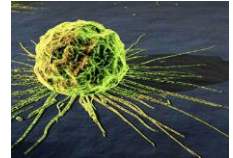
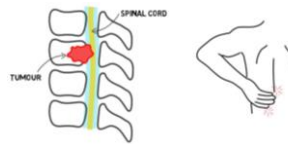
Common OEs e.g.:

**Tumor Lysis
Syndrome
(TLS)**

**Febrile
neutropenia**

**Spinal Cord
Compression
(SCC)**

**Hypercalcemia
of malignancy
(HCM)**





**Role of
nurses in
OEs**

**1. Care
provider**

- Formulate nursing care plan
- Carried out physician plan of treatment
- Managing symptoms – treating the symptoms

2. Communication

- Education to patients & family members
- Communicate with team members

3. Researcher

- Participate in research/clinical trial
- Applying evidence-based nursing practice



1. Care provider Formulate nursing care plan

- **Recognize and address signs & symptoms:**

- ☐ Perform comprehensive, head-to-toe assessment.
 - ☐ Recognizing & addressing the early signs & symptoms & psychological issues
- ☐ Slight changes to an assessment can be the presenting sign of a significant emergency.
 - ☐ e.g.: back ache, difficulty in urination, unable to move LL.
- ☐ Assessment of data collection:
 - ☐ During admission
 - ☐ On-going assessment
 - ☐ Emergency
 - ☐ During follow-up



1. Care provider Formulate nursing care plan

- Carried out physician plan of treatment & provide care for symptom management:
- Examples:
 - ☐ Assist in serial blood testing – monitoring electrolyte imbalances
 - ☐ Administer intravenous fluids therapy -TLS
 - ☐ ICU monitoring to ensure kidney function; temporary hemodialysis.
 - ☐ Strict intake/output monitoring:
 - ☐ treat not only decreases in urine output but also the threat of fluid overload.
 - ☐ Administration of medications:
 - ☐ Allopurinol & rasburicase - used to reduce serum uric acid levels.
 - ☐ Special diet : renal diet (low in potassium and phosphorus)



2. Communicator Education to patient & family members

- Educate patients and caregivers:
 - ☐ on preventive measures,
 - ☐ identifying early signs and symptoms,
 - ☐ administering therapies and assessing their efficacy and side effects,
 - ☐ managing symptoms
- “Clear and honest explanation to patients and caregivers is important. Make sure they understand the possible signs and symptoms of pertinent oncologic emergencies, as well as the consequences of late recognition,” (Martin, ONS 2018)
- Provide written information - disease, treatment, and potential complications.
- Most importantly, provide a written list of signs and symptoms along with when and where to call.
- Develop a Symptom diary & self care booklet or Mobile Apps.

2. Communicator

Education to patient & family members

- Evaluate the level of understanding:
 - ☐ Ask for feedback about the lesson learned.
 - ☐ When they're with you in the clinic or in the hospital, have them practice what they will say if they need to call the clinic, hospital, or answering service.
- Help for patients to recover from one of these complications and maintain a reasonable quality of life.
- Develop a nurse navigator program (Reed & Rua, 2020).



2. Communicator

Communicate with team members

- Document care & communicate well between all team members
 - ☐ Ensure the whole MDT receive a consistent message – all team members should be on the same page.
- Clear goals
 - ✓ Long term care plan
 - ✓ Preferences
 - ✓ Values
 - ✓ Necessary clinical information



3. Researcher

- Participate in research/clinical trial:
 - ☐ Assist/collaborate in collect data from the patients
 - ☐ Interviewing patients and family members to get a true information about their needs/problems before, during & after treatment
 - ☐ Perform own research to improve nursing practice esp. preventive measures
- Applying evidence-based nursing practice
 - ☐ Integrated evidence into practice and helped to implement innovative models to improve patient care esp.: symptom management



Conclusion

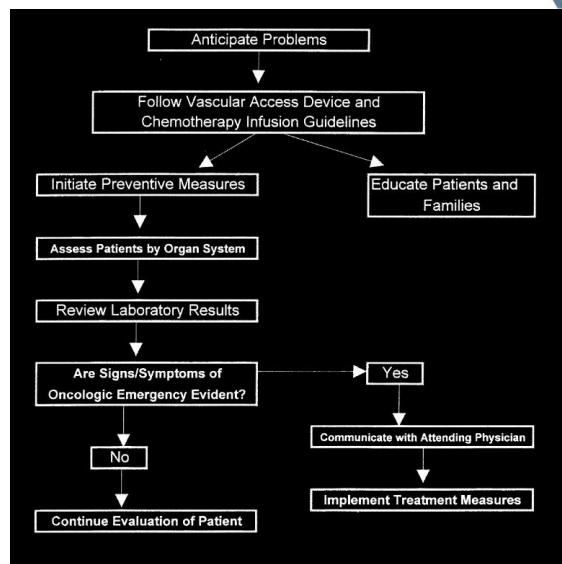
- Nurses play an extremely important role in the diagnosis and treatment of OEs.
- Fundamental skills required include nursing assessment:
 - ☐ Vital signs & organ systems
 - ☐ Management of intravenous lines
 - ☐ Awareness of clinically significant abnormal laboratory results with prompt notification of physicians
 - ☐ Recognition of allergic reactions & extravasation
- Early recognition of OEs leads to better outcomes. Prevention is the ideal goal.
- Education of family members regarding important symptoms is major nursing responsibility



Skilled nurses greatly impact care of patients by assisting in detection, management, and prevention of these clinical crises related to cancer and its treatment.



Algorithm: Nursing Principles pertinent to care of oncologic emergencies



Sources: Warden & Denise, Oncologic Emergencies: Implications for nurses. Journal of Intravenous Nursing (2022)

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