

PATIENT CARE THEORY 2

UNIT 4, PART 1: Oncology

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Oncologic Emergencies

causes of most emergencies 4 categories:

- ❖ Metabolic emergencies
- ❖ Hematologic emergencies
- ❖ Infectious and inflammatory emergencies
- ❖ Mechanical emergencies



Oncologic Emergencies

Metabolic emergencies

- ❖ Electrolyte imbalances, substrate deprivation
- ❖ Tumor lysis syndrome (TLS) is the most common
 - a metabolic triad of hyperuricemia, hyperkalemia, and hyperphosphatemia
 - Renal failure
 - symptomatic hypocalcemia
- ❖ Hypercalcemia, hyponatremia, hypoglycemia, adrenal failure, and lactic acidosis are relatively common



Oncologic Emergencies

Hematologic abnormalities

- ❖ abnormal hematopoiesis
 - Hyperviscosity due to dysproteinemia
 - Hyperleukocytosis
 - underproduction is less common (e.g. thrombocytopenia, neutropenia)
- ❖ DIC - Coagulopathy
 - hemorrhage, thrombosis, or both



Oncologic Emergencies

Infections or inflammatory emergencies

- ❖ Immunosuppression = primary underlying cause
- ❖ increased risk for acute life-threatening infections and acute inflammatory processes
 - direct result of disease, treatment, or both
- ❖ Infectious emergencies
 - bacteria, parasites, mycoplasmata, viruses, and/or fungi
 - Pneumonitis, pancreatitis, hemorrhagic cystitis, enterocolitis extravasation of chemotherapy agent



Oncologic Emergencies

Mechanical emergencies

- ❖ acute events that result from direct compression, obstruction, or displacement of vital tissues by a neoplastic process
- ❖ e.g. Neurologic (e.g. cord compression or ↑ ICP)
- ❖ Respiratory (e.g. A/W obstruction)
- ❖ Cardiovascular (e.g. tamponade)
- ❖ gastrointestinal (e.g. obstruction, bleeding)
- ❖ urologic
- ❖ fractures



Common Cancer Related 911 Calls

- ❖ SOB
- ❖ Severe pain
- ❖ General weakness
- ❖ Fever*
 - Patients are often told to get themselves to the hospital ASAP at the onset of any fever (during treatment)
- ❖ Sepsis
- ❖ Internal bleeding
- ❖ Stroke-like signs/symptoms



Assessment & Management

- ❖ Thorough Hx and focused exam
- ❖ Supportive care
- ❖ ABCD
 - e.g. salbutamol for SOB and wheezing in lung Ca
- ❖ IV access
- ❖ Analgesia (e.g. ketorolac)
- ❖ Prepare for a variety of medical emergencies
- ❖ Ask about resuscitation wishes (for terminal Ca)
- ❖ Transport



Cytotoxic chemicals

- ❖ Chemotherapy drugs are considered “cytotoxic”
- ❖ Refers to chemicals and medications that are toxic to cells
- ❖ Includes medications and biological sources from patients receiving chemotherapy (blood, urine, vomit, feces)
- ❖ Spill kits and containment materials may be found on scene.
 - Use PPE as required

Cytotoxic chemicals

- ❖ Ask patient or family for information on the type of drug they are on (will likely have been given written information regarding the cytotoxic medication)
- ❖ Includes: usual routes for excretion of drug
 - Approximate time residues may continue to be excreted
 - Home storage of drugs
 - Handling precautions
 - Laundry precautions
 - Waste elimination handling procedures
 - How to deal with a spill

QUESTIONS

