

SEPSIS NURSING INTERVENTIONS

COLLABORATIVE CARE¹

- ✓ Fluid resuscitation
- ✓ Optimize oxygen delivery
- ✓ (increase supply and decrease demand)
- ✓ Optimize cardiac output
- ✓ Vasopressors
- ✓ Correct acidosis
- ✓ Obtain cultures
- ✓ Antibiotics

POSSIBLE NURSING DIAGNOSES¹

- Fluid Volume Deficit
- Decreased Cardiac Output
- Ineffective Tissue Perfusion
- Organ Ischemia/Dysfunction
- Decreased Gas Exchange
- Hypoxemia
- Decreased Urinary Output
- Fear and Anxiety
- Altered Family Process

Survival rates for patients have shown to improve when a systematic chain link of survival and “Sepsis Bundle” or sepsis protocols are used along with early identification of symptoms. As noted earlier, Sepsis now joins CVA and MI as far as hospitals having protocols in place with standardized care within the “Golden Hours”. Multiple studies have shown that the first 6 hours of early sepsis management are especially important in regards to steps taken that can have a significant impact on patient outcomes.⁴

This is where the EGDT: Early Goal-Directed Treatment comes into play. EGDT promotes early resuscitative efforts. ³



Aggressive IV fluids, vasopressors, isotropic agents, blood products, along with essential diagnostic lab tests, broad-based antibiotics and finding infections sources are all included in part of this window of opportunity.³ The rising trend in the treatment of sepsis in using the “bundle”. The bundle was conceptualized by IHI- the Institute for Healthcare Improvement. Bundles are evidenced-based practices comprised of three to five interventions grouped together. When these bundles of focused care are delivered within a certain time frame in an all or nothing manner, they can be instrumental in improving patient outcomes.³ The Surviving Sepsis Campaign (SSC) is the first initiative of its kind to bring together three leading professional organizations in the field of sepsis: the European Society of Intensive Care Medicine, the Society of Critical Care Medicine, and the International Sepsis Forum. The purpose of the SSC is to create an international collaborative effort to improve the treatment of sepsis and reduce the high mortality rate associated with the condition. ⁹ www.survivingsepsis.org

Of course all of the above is not possible without superior nursing assessment skills because the fact remains that early identification of sepsis symptoms are essential. A nurse should always keep in mind that sepsis is possible in each and every patient they care for and to assess for those key signs and symptoms. It all starts with basic nursing assessment. A thorough history should be done -with family at bedside when available- to assist with and supplement valuable information. Ask about past or recent history of infection, along with history of surgeries as this can provide the infection link to sepsis. Inquire about chronic conditions. Comorbidity increases a patient’s risk for sepsis development. Physical assessment should include: Vital signs with a focus on temperature, heart rate and blood pressure as those are three of the parameters for sepsis, along with a recent history of, or active infection.

Pulse oximetry, capillary refill and skin tone are used to assess oxygenation. Reduced oxygenation or hypoxemia can be a sign of sepsis as the microvascular systems are affected due to diminished gas exchange. Monitoring urinary output is paramount in assessing kidney function, as the hypotension seen in sepsis can lead to diminished renal perfusion and acute renal failure. Assessment of bowel sounds and last BM can give the nurse a heads up on possible signs of an ileus due to slowed peristalsis secondary to intestinal ischemia. Frequently assessing lung sounds is vital as adventitious lung sounds are heard with pulmonary edema due to reduced capillary blood flow and enhanced microvascular permeability.²

When a patient falls into the categories above, the RN must advocate for the patient, promptly provide assessment findings to the MD and recommend further testing and interventions. The sepsis bundle can include; fluid resuscitation to maintain blood pressure/perfusion, supplemental oxygen to alleviate hypoxemia, broad-spectrum antibiotics to treat infection and additional diagnostic labs.

LABS TO MONITOR AND/OR REQUEST THE MD TO ORDER

ABG's	Assess gas exchange/hypoxemia
Bun and Creatinine	Assess renal function
CBC	Assess WBC's and Band shifts
INR, PTT	Assess coagulopathy
Lactate	Assess for acidosis, ischemia, infection
Cultures; blood, sputum, urinary	Infection sources