Sepsis protocol in action

A nurse's quick action prevents progression to septic shock.

By Jessica L. Dzubak, BSN, RN

Mary Jones, a 55-year-old woman with a history of type 2 diabetes and multiple abdominal surgeries, is moved to the medical-surgical unit 3 days after surgery to repair a significant bowel obstruction. The operative report notes that she has abdominal adhesions from previous surgeries.

History and assessment hints

When Louisa, the night shift nurse, enters Mrs. Jones' room, she notes that the patient's speech is clear, but she seems confused. This is a drastic change from the previous night. When Louisa touches Mrs. Jones' arm to take her blood pressure (BP), she notes that her skin feels hot and moist.

Louisa takes a full set of vital signs and notes that Mrs. Jones' BP is 90/50 mm Hg despite not receiving any narcotic pain medication for several hours. Her pulse is elevated at 110 beats per minute, her temperature is 101° F (38.3° C), and her respiration rate is 6 breaths per minute.

Louisa assesses Mrs. Jones' incision, and it appears to be at the appropriate stage of healing. She notes mild redness around the sutures, which is to be expected 3 days after surgery. Louisa sees no purulent drainage or new significant swelling, and all sutures are intact.

Louisa assesses Mrs. Jones' level of consciousness and mental orientation. She can state her name and the year, but she doesn't remember why she's in the hospital, although she says she isn't in pain. Mrs. Jones has no history of confusion and has been "alert and oriented times three" for her entire stay in the hospital. Throughout their conversation, Louisa notes that Mrs. Jones is more tachypneic and dyspneic than she was the previous night. She takes a bedside point-of-care glucose, which reveals an elevated glucose of 249 mg/dL.

Louisa performs a bedside chart review and notes that all of Mrs. Jones' vital signs were normal upon admission to the medical-surgical unit. However, both her BP and urine output have been trending down for the past 12 hours. And, until now, her glucose had been under control.

On the scene

Because Mrs. Jones meets the criteria for sepsis, Louisa notifies the physician, calls a sepsis alert, and begins sepsis protocols. She draws two sets of blood cultures from two different sites, starts a second large-bore I.V. line, and prepares I.V. fluids for aggressive fluid resuscitation. Louisa draws additional blood work, including a complete blood count to assess Mrs. Jones' white blood cell count and lactate level. Next, Louisa confirms the patient's allergies, including to any antibiotics, and administers antipyretics.

After contacting the pharmacy for stat antibiotics per the physician's order, Louisa obtains an accurate weight for Mrs. Jones, anticipating that weight-based vasopressors may be needed. She then inserts an indwelling catheter to assess intake and output, and she obtains a urine sample for analysis. As a precaution, Louisa brings the central line cart to the bedside.

The sepsis alert team confirms that Mrs. Jones meets the criteria for sepsis. Louisa's prompt assessment and action means that Mrs. Jones will avoid progression to septic shock.

Outcome

Because of Mrs. Jones' increased acuity and level of care, she's transferred to the intermediate care unit for closer monitoring. She will have repeat blood draws and continue to receive antibiotics and fluid resuscitation. Further testing with computed tomography imaging reveals that the source of her sepsis was an infected adhesion in her bowel. As her infection is controlled and her vital signs improve, her mentation returns to baseline.

Education and follow-up

Mrs. Jones and her family are educated about sepsis, and the team discusses the effectiveness of the sepsis protocols. The patient and her family thank Louisa for her timely assessment and intervention. ★

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Selected references

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