Treating Infections Near the End of Life

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How many times in your nursing career has a parent or family member turned to you and said, "What would you do?"

Most likely, many times, if nurses kept count, and it's rarely an easy question to answer. Nurses are at the bedside and in contact with the patient and family much more frequently than any other healthcare provider. This means that nurses often witness family members wrestling with decisions about the care of their loved ones. One of these decisions is whether to start or continue antibiotic treatment for an infection in a patient with a poor prognosis who is nearing the end of life.

The goal of palliative care is to promote comfort and quality of life for patients with serious illnesses. Palliative care clinicians and others who care for seriously ill patients nearing the end of life seek to balance providing enough care to ensure comfort while avoiding care that could diminish quality of life. Thus, a decision about a treatment such as antibiotics, which is relatively simple in any other patient, becomes complicated and difficult in the final weeks or months of life.

Antibiotic treatment near the end of life is actually quite common, especially in patients with cancer. Antibiotics are often continued up until the day before death, even in patients whose death is expected and are otherwise receiving only comfort care. But when the overriding concern is the patient's comfort, does treating an infection with antibiotics lessen or worsen the symptom burden?

In a review of eight studies that measured symptom response following antimicrobial therapy in hospice or palliative care patients, symptom improvement varied by the type of infection driving the need for antibiotic treatment. Patients with urinary tract infections (which are known to cause the uncomfortable symptoms of urgency and burning with urination) experienced the greatest improvement from antimicrobial therapy.

Other research has pointed to additional factors to consider when making decisions about antibiotic therapy, some of which are not well recognized. These include drug-drug interactions, adverse effects such as nausea or diarrhea, development of secondary infections, cost, the need for follow-up cultures and blood work, and delays in transitioning patients to hospice or palliative care settings (for example, if an intravenous line is required for antibiotic administration).

Vaughan and colleagues created an antibiotic decision tree that nurses and others can use to guide patients and families in clinical and ethical decision-making surrounding the medical treatment of infections near the end of life. In most cases, when the overarching goal is to keep the patient comfortable but not to prolong life, antibiotics aren't used. However, in patients who are expected to survive to benefit from the administration of antibiotics that carry a low likelihood of burdensome symptoms, a trial of antibiotics may offered. Even in patients who still desire aggressive care and prolongation of life, antibiotics would not be indicated if they are deemed to be ineffective or harmful, according to the decision algorithm. The final decision to treat, or not treat, an infection is highly individual and must always be guided by the key question: Is treatment consistent with the individual goals of this patient?

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