

Student Name

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NR 567-Advanced Pharmacology for the Adult Gerontology Acute Care Nurse Practitioner



Week 7: Clinical Decision-Making Discussion

You are working in the Emergency Department and a 20-year-old female with history of intravenous drug abuse presents with concern of septic shock.

1.) What are the considerations in choosing the appropriate antibiotic for this patient?

According to Mahapatra & Heffner (2023), septic shock is considered the most severe complication of sepsis, which increases the risk for mortality. One of the most common causes of sepsis and septic shock is related to intravenous drug use as this increases the risk of skin and blood infections due to repeated exposure of the use of contaminated syringes or untreated open wounds (Annie et al, 2018). According to Gauer et al (2020), the Surviving Sepsis Campaign (SSC) international guidelines of 2016 recommend the administration of antibiotics within the first hour. The type of antibiotic initiated is contingent upon several factors, such as the suspected infection site, the pathogen, the clinical context (if it is community vs. hospital acquired sepsis), and local resistance patterns (Gauer et al, 2020). Blood culture results are also vital to determining the appropriate antibiotic therapy as this identifies the causative organism (Gauer et al, 2020). In obtaining blood culture results first as well as identifying the several factors mentioned earlier prior to initiating antibiotic therapy, this process decreases the risk of antimicrobial resistance, drug toxicity, and overall treatment cost (Gauer et al, 2020). For most infections associated with sepsis and septic shock, research shows it has been sufficient to initiate antibiotic therapy for seven to ten days (Gauer et al, 2020). This patient is a 20-year-old female, and because of her age and increased risk of pregnancy, this is another important aspect to consider prior to initiating antibiotic therapy, and a pregnancy test should also be obtained.

2.) Explain your thought process, questions you would need to ask, and what antibiotic you would order, and when.

Prior to initiating antibiotic therapy on this patient, I would find out more information about her and consider many factors. Some of the factors I would explore include inquiring about her past