

Title: Beyond the Shock: The Truth about Post-Cardiac Arrest Pneumonia Prophylaxis

Presenter:

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Learning Objectives:

1. Explain the etiology of post-cardiac arrest pneumonia and common pathogens implicated
2. Discuss the current literature regarding pneumonia prophylaxis post-cardiac arrest
3. Identify an appropriate treatment plan for those indicated for post-arrest pneumonia prophylaxis

Abstract:

With the physiologic changes and interventions that occur post-cardiac arrest (PCA), pneumonia is a common infection implicated. It has been estimated that up to 60% of PCA patients are diagnosed with pneumonia. Given this information, there have been arguments suggesting to prophylax all PCA patients for pneumonia. However, there has not been strong guidance recommending for or against prophylaxis in the patient population. Current post-cardiac arrest management recommendations state that empiric antibiotics may be used, while recent studies have come out with differing results. Given the need for antimicrobial stewardship due to the ongoing concern of antibiotic resistance, as well the as the side effects that could result, the benefits of pneumonia prophylaxis must outweigh the risks. When deciding whether to utilize pneumonia prophylaxis, questions arise on which specific patients are indicated, what pathogens do we cover for, which agent to use, and what the duration of therapy should be. This education will discuss the current literature assessing pneumonia prophylaxis post-cardiac arrest and help provide recommendations on this debated topic.

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Questions:

1. Which of the following is not a risk for the development of pneumonia to occur post-cardiac arrest?
 - a) Aspiration
 - b) Mechanical ventilation
 - c) Targeted hyperthermia**
 - d) Post-cardiac arrest syndrome

2. Of the trials mentioned, which of the following study outcomes showed a benefit from antibiotic prophylaxis compared to placebo?
 - a) Early onset pneumonia**
 - b) Late onset pneumonia
 - c) Mortality
 - d) All of the above

3. Which of the following factors must be taken into consideration when choosing an antibiotic regimen for post-cardiac arrest pneumonia prophylaxis?
 - a) Spectrum of activity
 - b) Renal function
 - c) Allergies
 - d) All of the above**