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**The Importance of Preventing and Managing Sepsis Associated Acute Kidney Injury**

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**Background:** Acute Kidney Injury (AKI) is a common problem in patients that are critically ill. Critical care patients with AKI have a longer length of hospital stay, more complications, and higher mortality. However, the most frequent cause of AKI in the critically ill patient is associated with sepsis. Sepsis causes almost half of the cases of AKI in the critically ill.

**Problem:** The nursing care of patients with sepsis associated acute kidney injury can be challenging. Critically ill patients must be assessed for clinical manifestations of infections as these can lead to AKI. Sepsis and septic shock create hemodynamic instability and cause hypoperfusion to the kidney, which can lead to morbidity and mortality.

**Discussion:** Multiple studies have reported an increase of AKI incidence according to sepsis severity. In one study, AKI incidence increased according to sepsis severity (4.2% for sepsis, 22.7% for severe sepsis, and 52.8% for septic shock). Therefore, it is imperative that nurses understand acute kidney injury and the management of it in patients with sepsis.

**Outcomes:** When providing care for critical ill patients with sepsis associated AKI, the primary goals are to eliminate nephrotoxic substances/drugs, provide early disease recognition, implement rapid fluid resuscitation, provide early administration of antibiotics, and prevent prolonged episodes of hypovolemia. In addition, the use of continuous renal replacement therapy (CRRT) has also been used in unstable critically patients. The aggressiveness of the combination of these therapies can lead to improved outcomes for patients with sepsis and also prevent the patient from progressing to chronic kidney disease (CKD).

**Conclusion:** The severity of injury and poor outcomes associated with sepsis associated AKI worsen with delayed recognition of injury. Therefore, to improve the care and outcomes of critically ill patients, nurses and interdisciplinary teams need to use evidenced-based practice strategies for the prevention, early detection, and treatment of sepsis associated acute kidney injury.

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