



Acute Kidney Injury (AKI)

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Abstract:

Acute kidney injury (AKI)—or acute renal failure (ARF), is defined as an abrupt or rapid decline in renal filtration function. This condition is usually marked by a rise in serum creatinine concentration or by azotemia (a rise in blood urea nitrogen [BUN] concentration). However, immediately after a kidney injury, BUN or creatinine levels may be normal, and the only sign of a kidney injury may be decreased urine production.

Categories of AKI:

AKI may be classified into 3 general categories, as follows:

- Prerenal - As an adaptive response to severe volume depletion and hypotension, with structurally intact nephrons
- Intrinsic - In response to cytotoxic, ischemic, or inflammatory insults to the kidney, with structural and functional damage
- Postrenal - From obstruction to the passage of urine

Infectious complications:

Infections commonly complicate the course of AKI and have been reported to occur in as many as 33% of patients with AKI. The most common sites of infection are the pulmonary and urinary tracts. Infections are the leading cause of morbidity and death in patients with AKI. Various studies have reported mortality rates of 11-72% in infections complicating AKI.

Biography:

Samir Mustafa Smisim is a Medical Director of Training Programs, Saudi Red Crescent Authority. Head Quarter , Riyadh. International Speaker about Mass Gathering Medical Management in SAPCON 2019 , Hyderabad , India. ITLS Instructor & SRCA Chapter Medical Director 2008) . NAEMT Centre Medical Director 2015. He is a Response and Disaster Management Instructor (SRCA , KSA) 2018 . ASLS Instructor, at Miami University in 2013 . ACLS Instructor in 2012. Heart saver Instructor 2010 . EMT-Basic & Paramedic and also Disaster planning and Management Instructor in Pennsylvania, USA.



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