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## **AKI in the Elderly: Challenges and Strategies for Care**

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The aging process causes several structural and functional changes in the kidneys. Renal parenchyma decreases by up to 30% by the age of 70, leading to a 30-50% reduction in glomeruli and an increase in glomerulosclerosis. Additionally, there may be a decrease in renal blood flow of more than 50%, a progressive reduction in glomerular filtration rate, and impaired urine concentration and dilution. Despite these changes, older individuals can still maintain good fluid and electrolyte balance under normal conditions. However, systemic disease or exposure to exacerbating factors, such as nephrotoxic medications, may prevent older kidneys from adapting to hemodynamic changes, leading to a higher incidence of acute kidney injury in the elderly compared to younger individuals. This lecture reviews the incidence and prognosis of acute kidney injury in elderly patients based on several studies. It also discusses barriers to the diagnosis and treatment of acute kidney injury in this population and strategies to overcome them. Finally, this lecture will review known risk factors for acute kidney injury and discuss strategies for prevention in these populations.

**Keywords:** Acute kidney injury, elderly