

**#EA21: COVID-19 - AKI vs Pre-Existing Kidney Disease**



According to findings presented at Euroanaesthesia 2021, among patients with COVID-19 admitted to the ICU, those with an abrupt decline in kidney function are more likely to die during hospitalisation than those with pre-existing kidney disease. In addition, findings show that renal replacement therapy does not improve their chances of survival.

Nearly a quarter of patients hospitalised with COVID-19 are affected by AKI. Evidence shows that kidney injury is linked with a higher risk of death in COVID-19 patients. However, outcomes of patients hospitalised with COVID-19 and AKI are still not well understood.

This study aimed to determine whether AKI in COVID-19 patients without prior kidney disease correlates with higher mortality and whether dialysis can reduce this risk. A total of 129 patients admitted with confirmed COVID-19 to two ICU at a major teaching hospital in Vienna were included in the study. Patients were divided into three groups - those with a history of kidney disease at admission, those with previously healthy kidney but who developed acute kidney injury on day five of their ICU stay and those with normal kidney function both before admission and on day five of their ICU stay. Patients were followed up until the end of their ICU stay.

Findings show that 55% of patients with a history of kidney disease survived their ICU stay compared to 46% of patients with AKI and 83% of patients with normal kidney function. Among patients with kidney dysfunction, the likelihood of survival was below average compared to patients with normal kidney function. In addition, the early initiation of dialysis or the number of days on dialysis did not improve survival.

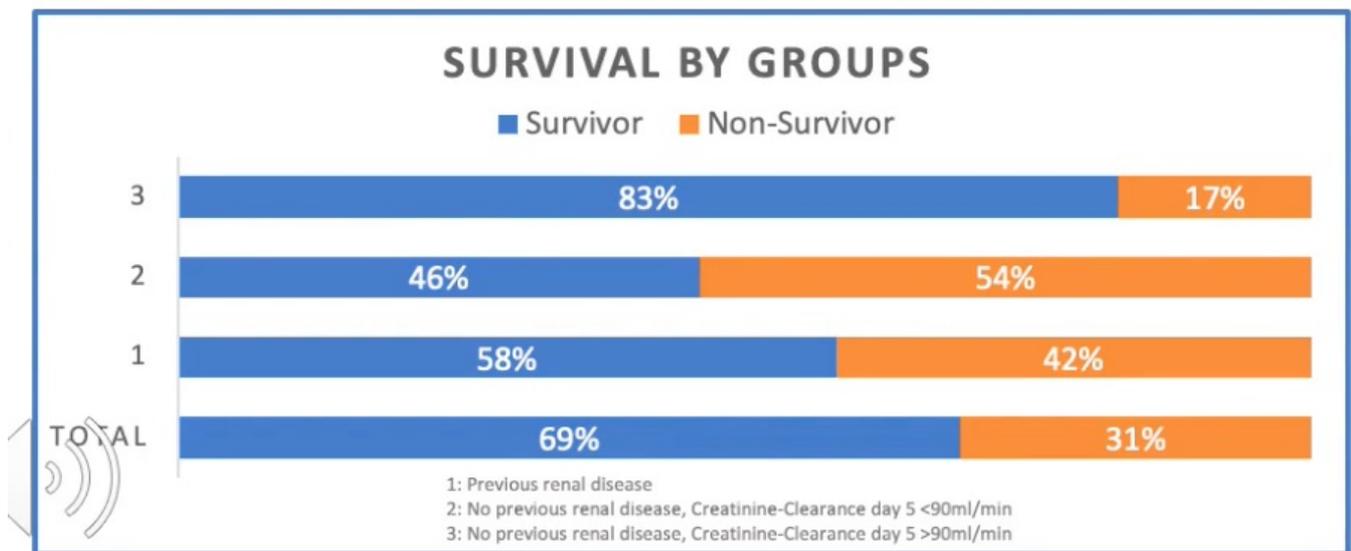


Image Credit: Euroanaesthesia 2021

These findings confirm kidney dysfunction is a key risk factor for COVID-19 related death in the ICU. These findings also suggest that patients with COVID-19 who develop AKI face a higher risk of dying in the ICU than those with pre-existing chronic kidney disease.

Source: [Euroanaesthesia 2021](#)

