

The need for dialysis treatment among hospitalized patients with acute kidney injury: A single centre experience - Eleni Chelioti, General Hospital of Piraeus "Tzaneio"

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Statement of the Problem: Acute Kidney Injury (AKI) is a serious complication in hospitalized patients with single-center studies reporting a rising incidence over the past two decades and case fatality rates exceeding 50% among those who require dialysis treatment.

Aim: The purpose of this study was to assess the risk for dialysis among hospitalized patients with AKI and previously normal renal function. Secondly we assessed the effect of comorbidities such as arterial Hypertension (HTN), Diabetes Mellitus (DM) and Coronary Artery Disease (CAD) on dialysis risk.

Method: The study was conducted prospectively for 24 months recording all consenting hospitalized patients in a single general hospital in Piraeus, Greece. Patients were included if they had previously normal renal function and AKI at the time of their admission at the hospital. Parameters recorded and analyzed were: Demographics, full blood and biochemistry tests, history for HTN, DM and CAD and the need for

dialysis treatment. The statistical analysis was carried out by single-factorial and multivariate regression analyses.

Findings: 212 patients were studied, (115 men and 97 women), average age of 75±12 years. 10.8% (23/212) of the patients with AKI (95% CI 7.1; 16.0) underwent dialysis. The effect of comorbidities was not statistically significant. Statistically important factors associated with the need for dialysis in single-factorial analysis were admission values of serum creatinine (SCr) >3.3 mg/dL (p=0.03), age >80 years (p=0.001) and male gender (p=0.045). In the multi-factorial analysis the only independent dialysis factor was SCr>3.3 mg/dL (p=0.045). **Conclusion & Significance:** The percent of hospitalized patients with AKI needing dialysis in our hospital was relatively low. Comorbidities did not aggravate the need for dialysis. The only parameter significantly affecting the risk for dialysis was the SCr value at the time of admission.

Note : This work was presented in 3rd World Kidney Congress, which was scheduled in October 08-10, 2018 at Dubai, UAE.