OUTCOMES OF AKI USING RISK ASSESSMENT AND NEPHROLOGY RAPID RESPONSE TEAM (NRRT) IN ADULT ICU PATIENTS IN FUNDACIÓN CARDIOINFANTIL IN BOGOTÁ – COLOMBIA

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Background: AKI Risk Assesment and NRR Teams procure reversion of risk factors and amelioration of AKI consequences. In our hospital, those strategies have been implemented universally. We describe AKI outcomes in a colombian ICU with a nephrology rapid response team.

Methods:

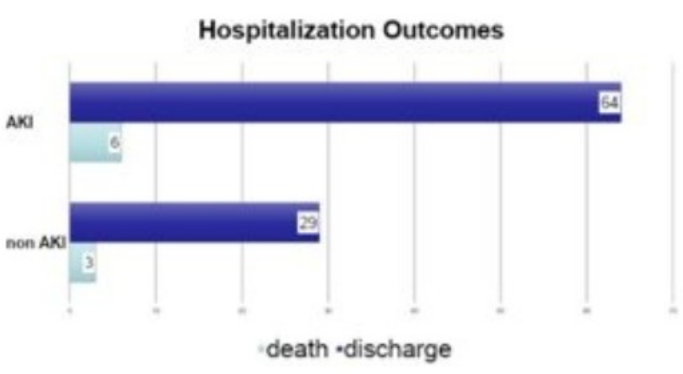
From our database, we searched adult patients admitted to ICU between january-june 2020, excluding those with previous diagnosis of AKI, serum creatinine >2,5 mg/dL, dialysis, or kidney transplantation at ICU admission.
We analyzed AKI criteria (urine output and creatinine) to establish the neo - incidence of AKI in our ICU and outcomes at discharge under NRRT alignments.

Results: From 881 ICU patients admitted to our 3 ICU between january 1st and June 30, we selected 102 patients (12%) with inclusion criteria (women 49%), mean age 58,9 (18-95). Main indication for ICU admission was cardiovascular and mean time in ICU was 5,5 days.
AKI developed during ICU hospitalization in 68% of patients, predominantly men (84,6%). There were no differences in demographic or comorbidity variables between groups. (table 1)
Mean creatinine at admission was not statistically different in patients with AKI (mean 0.95 mg/dL; 0.4 -1.80). There was more exposition to nephrotoxic agents in AKI group.
Sepsis was present in 19,6% of all patients (n 20), and was more prevalent in AKI patients (60%, n 12).

	AKI		
	no (N=32)	yes (N=70)	Overall (N=102)
gender			
female	24 (75.0%)	26 (37.1%)	50 (49.0%)
male	8 (25.0%)	44 (62.9%)	52 (51.0%)
age			
Mean (SD)	53.8 (19.1)	61.2 (17.2)	58.9 (18.0)
Admission creatinine			
Mean (SD)	0.873 (0.229)	0.994 (0.192)	0.956 (0.211)
Apache II			
Mean (SD)	21.5 (6.91)	22.9 (6.91)	22.5 (6.91)
Diabetes Mellitus			
no	29 (90.6%)	55 (78.6%)	84 (82.4%)
yes	3 (9.4%)	15 (21.4%)	18 (17.6%)
Cardiovascular disease			
no	24 (75.0%)	33 (47.1%)	57 (55.9%)
yes	8 (25.0%)	37 (52.9%)	45 (44.1%)
Hypertension			
no	22 (68.8%)	34 (48.6%)	56 (54.9%)
yes	10 (31.2%)	36 (51.4%)	46 (45.1%)
Pulmonary disease			
no	30 (93.8%)	62 (88.6%)	92 (90.2%)
yes	2 (6.2%)	8 (11.4%)	10 (9.8%)
Cirrhosis			
no	26 (81.2%)	60 (85.7%)	86 (84.3%)
yes	6 (18.8%)	10 (14.3%)	16 (15.7%)
Cancer			
no	24 (75.0%)	58 (82.9%)	82 (80.4%)
yes	8 (25.0%)	12 (17.1%)	20 (19.6%)
Sepsis			
no	24 (75.0%)	58 (82.9%)	82 (80.4%)
yes	8 (25.0%)	12 (17.1%)	20 (19.6%)
ICU outcomes			
death	3 (9.4%)	4 (5.7%)	7 (6.9%)
discharge	29 (90.6%)	66 (94.3%)	95 (93.1%)

Global mortality at ICU discharge was 6,9% (n 7) mostly in AKI group: (57%, n 4).
Mortality in total AKI patients was 5,7%.

CRRT for AKI was performed in 2 patients (2%) and Acute PD in 1 patient. One CRRT patient died, the other had renal recovery at end of hospitalization and PD patient remained in RRT for edematous syndrome at discharge (1%).



Conclusion: In our population, AKI is frequently found, but requirement of RRT is low when opportune interventions are provided to ameliorate kidney injury in ICU.

38th Vicenza Course on AKI&CRRT
a week of virtual meetings
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