RISK FACTORS OF NON-EARLY RECOVERY AFTER AN EPISODE OF ACUTE KIDNEY INJURY

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BACKGROUND

Acute kidney injury (AKI) is a severe condition with a high incidence, morbidiy and mortality.

This has not changed in recent decades, moreover, there is increasing evidence supporting the hypotesis that AKI is a risk factor for the future development or accelerated progression of chronic kidney disease.

Adequate follow-up studies after an episode of AKI are needed to identify predisposing factors or warning signs of this transition.

PATIENTS AND METHODS

Retrospective observational cohort study during a follow-up period of 9 years in a tertiary hospital, whitout cardiac surgery.

228 patients with AKI were included.

Potential subjects were identified and enrolled by systematic chart review using the hospital coding system (ICD-9). Patients were included if pre-renal and obstructive etiologies were excluded.

We used the ADQI definition and classification.

Patients with prior known chronic disease and those who died during the episode were excluded.

AIM

RESULTS

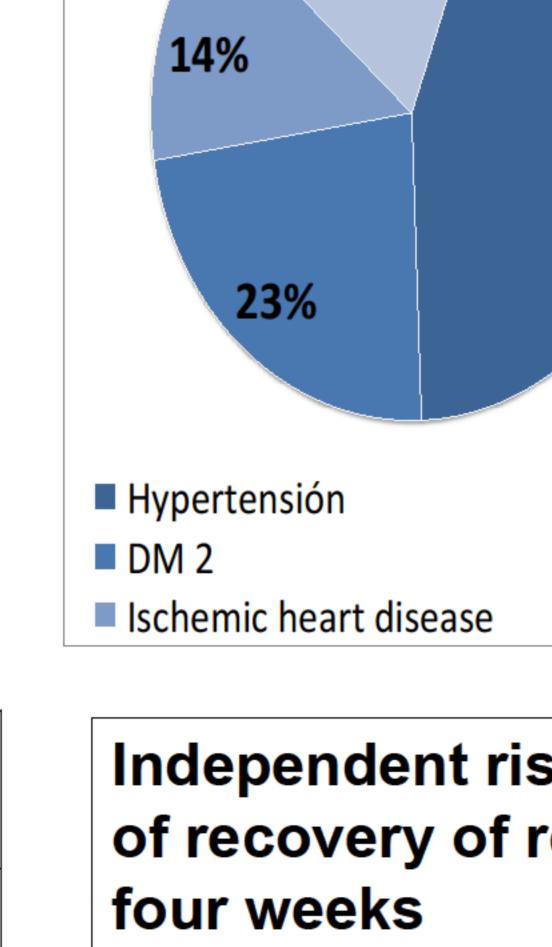
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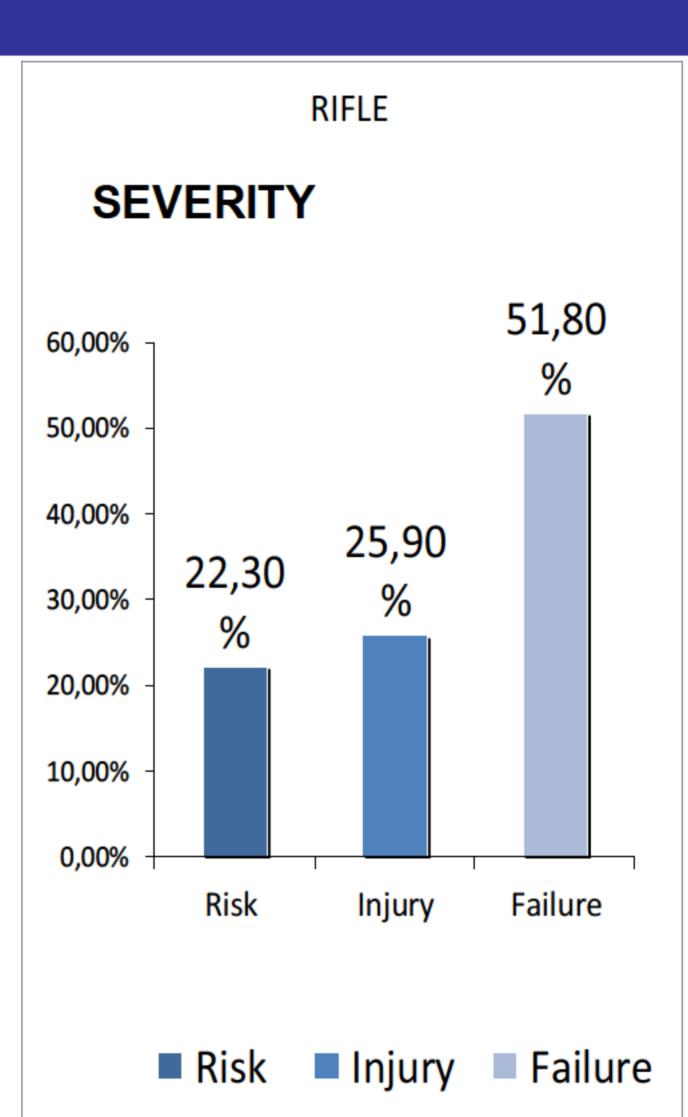
BACKGROUND

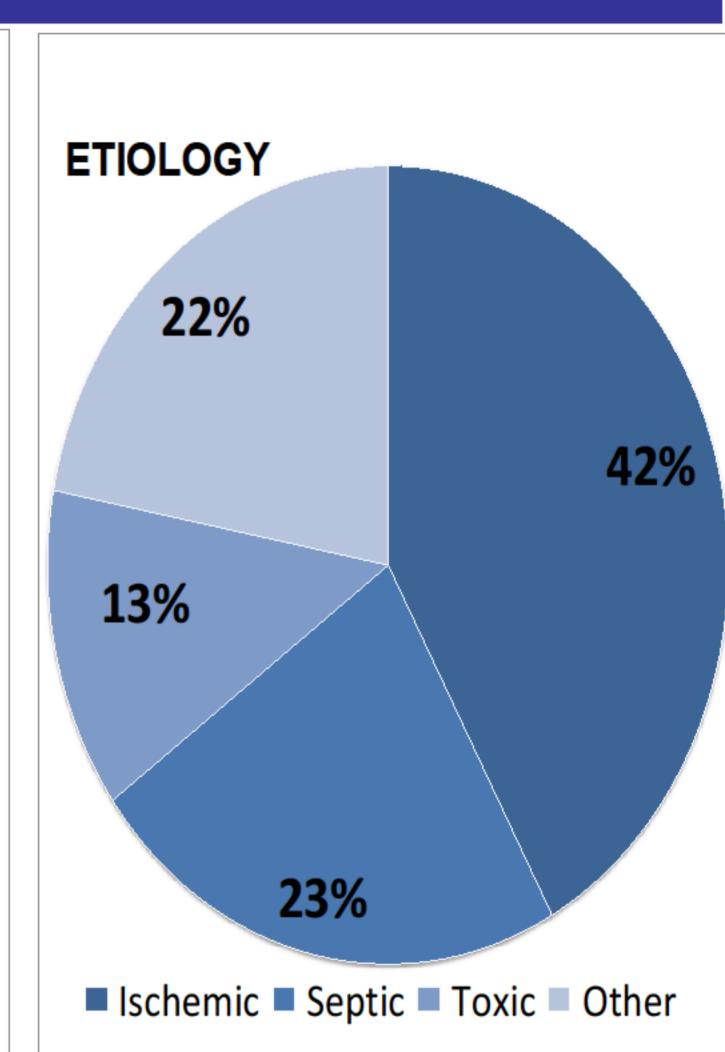
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To determine risk factors are related to non-recovery after an episode of AKI.

N	228
Men, n %	144 (64%)
Women,n %	88 (36%)
Age (mean <u>+</u> SD)	64 <u>+</u> 19 years
Caucasian, n %	219 (96%)
baseline serum creatinine(mean <u>+</u> D S)	1,03 <u>+</u> 0,4 mg/dl







Duration of AKI (mean ± DS)	32 ± 44 days		
Renal replacement therapy (n, %)	30 (13.2%)		
Renal function recovery after the first 4 weeks	Yes	No	
	185 (81.1%)	43 (18,9%)	

Independent risk factors for lack of recovery of renal function in four weeks	OR	CI 95%	p
Age > 64 years.	2,54	1,01-6,37	0,048
AKI secondary to nephrotoxicity	3,58	1,07-11,9	0,038
Serum creatinine during hospitalization > 4mg/dl	2,91	1,36-6,22	0,006

CONCLUSIONS

In our study the independent risk factors for lack of recovery of renal function during the first 4 weeks after an episode of AKI, are age > 64 years, serum creatinine> 4mg/dl and that the AKI was related to nephrotoxicity.

REFERENCES

- Coca SG, Singanamala S, Parikh. Kidney Int 81: 442-448 ,2012
- Brown JR, Kramer RS, et al.. Ann Thorac Surg 2010; 90: 1142–1148.
- Chawla LS, Kimmel PL.Kidney Int 82:516-524,2012.
- Bucaloiu ID ,et al.Kidney INT 81: 477-485,2012





