



GERIATRIC NEPHROLOGY. ACUTE KIDNEY INJURY IN ELDERLY PATIENT. DIFFERENCES IN ETIOLOGY, MORBIDITY AND MORTALITY. AGE IS NOT A PROGNOSTIC FACTOR.

Fco Javier Lavilla Royo, Christian Israel Alfaro Sanchez, Omar Jose Gonzalez Aristegui, Maria José Molina Higuera, Pelayo Moiron Fernandez Hinojosa, Altagracia Elisa Bello Ovalles, Paloma Leticia Martín, Nuria Garcia-Fernandez, Pedro Errasti Goenaga. *Nephrology Department. University Clinic of Navarra. Pamplona. Spain.*

• BACKGROUND AND AIM

There is an increase in age of hospitalized patients. Age is considered an acute kidney injury (AKI) prognostic factor. But can be more important than biologic age, the "clinical age" that include morbidity and health status. The objective is evaluate acute kidney injury (AKI) in elderly patient, and the influence of age as a prognostic factor.

MATERIAL AND METHODS

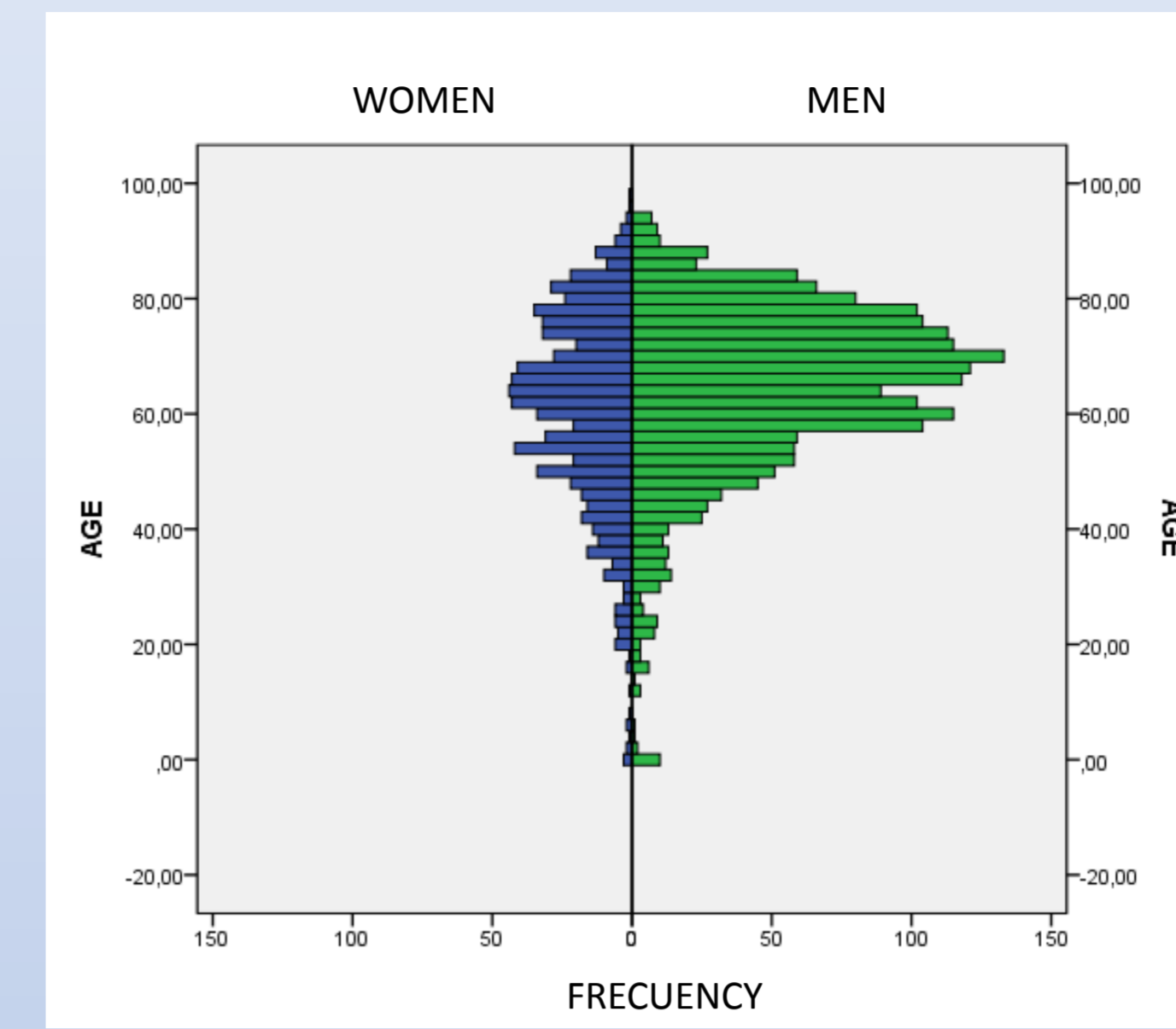
In a cohort with 2714 hospitalized patients (medium age 62 years, SD 0.3; 66.3 % males) with AKI (KDIGO).

We made three groups :

- Group A** age lower than 65 years.
- Group B** age between 65 to 85 years.
- Group C** age more than 85 years.

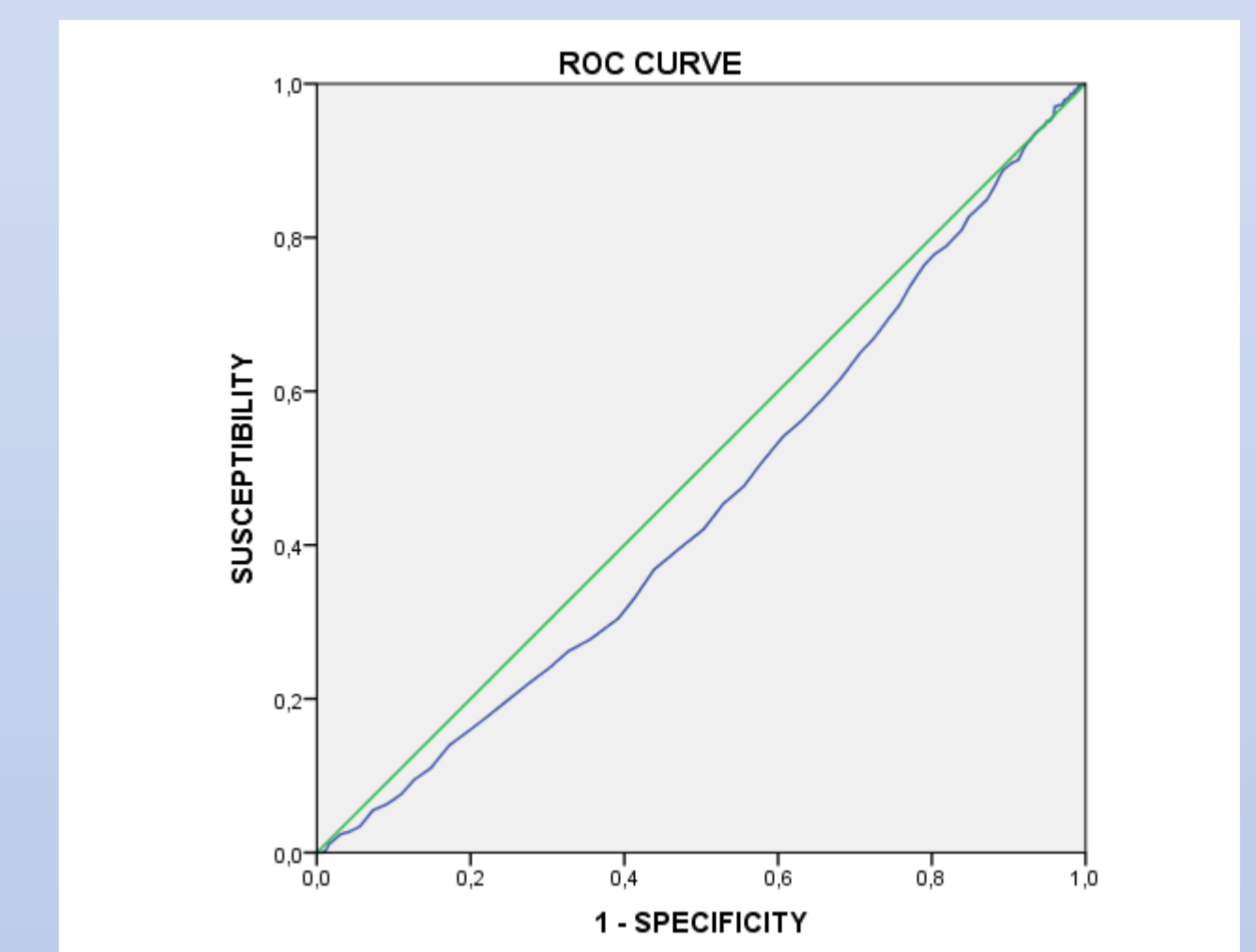
We evaluate AKI etiology, therapy and prognostic index (ISI –individual severity index-), chronic morbidity (cancer, chronic renal and cardiac failure, diabetes), health chronic status (Karnofsky) and acute morbidity (inflammatory status, lower hemoglobin level –anemia-).

We use SPSS 20.0.



IS BIOLOGICAL AGE A PROGNOSTIC FACTOR?

ROC CURVE AGE AND MORTALITY RATE



MULTIVARIATE ANALYSIS ISI VARIABLES AND EXITUS

	B	E.T.	Wald	gl	Sig.	Exp(B)
Paso 1 ^a						
ndecedad	,019	,030	,403	1	,526	1,019
sexo	-,237	,131	3,261	1	,071	,789
hipotil	,896	,148	36,556	1	,000	2,450
ictil	1,271	,133	91,172	1	,000	3,563
oligil	,978	,152	41,587	1	,000	2,659
comail	1,817	,239	57,936	1	,000	6,152
consil	,098	,219	,201	1	,654	1,103
respasis	,274	,170	2,609	1	,106	1,315
ntxil	-,103	,130	,630	1	,427	,902
Constante	-3,207	,301	113,563	1	,000	,040

Ndecedad: AGE. Sexo: sex. Hipotil: hypotension. Ictil: jaundice. Oligil: oliguria. Comail: Coma. Consil: Aware. Respasis: ventilatory support. Ntxil: nephrotoxicity.

RESULTS

Exitus 17.1%. We found LOWER mortality in elderly patients.

The AKI in these patients were:

More functional (hypovolemic) and less complex (ATN with functional) with lower renal replacement therapy requeriment. The ISI was higher but this prognostic index include age –confounding factor?-).

Lower incidence of oncological and inflammatory disease but more incidence of other chronic diseases (renal and cardiovascular).

Lower Karnofsky but with higher hemoglobin level.

Table 1

Table 1.

Group / %	AKI functional	ATN	Complex AKI	Renal replacement therapy	Chronic renal disease	EXITUS
A	33.1%	22%	39.1%	28.4%	34.4	19.5%
B	48%	18.7%	27.6%	24.4%	55.1	14.6%
C	64%	14%	20.9%	14%	66.3	14%
p	0.001	0.001	0.001	0.001	0.001	0.003
Group / %	Inflammatory disease	Surgical procedure	Diabetes	Chronic heart disease	Cancer	
A	46.8%	16.8%	6.7%	2.9%	62.9%	
B	35.6%	25.3%	12.3%	4.9%	41%	
C	29.1%	28.4%	16.3%	12.8%	14%	
p	0.001	0.001	0.001	0.001	0.001	
Group / Medium (SD)	C reactive protein peak	Lower hemoglobin level	ISI	Karnofsky		
A	15.1 (0.4)	8.5 (0.07)	0.2818	69.5 (0.4)		
B	15.4 (0.42)	9.2 (0.15)	0.3272	68.28 (0.4)		
C	11.3 (1.39)	9.82 (0.3)	0.3651	61.3 (2.02)		
p	0.038	0.001	0.001	0.001		

CONCLUSIONS

BIOLOGICAL Age is NOT prognostic factor in AKI. Is more important others (some acute diseases –inflammatory- ,chronic diseases –cancer-, health chronic status and AKI etiology–complexity related with previous clinical factors-).

BIOLOGICAL AGE VERSUS CLINICAL AGE

BIOLOGICAL AGE: CHRONOGRAPHY
 CLINICAL AGE: HEALTH CHRONIC AND ACUTE STATUS
 WE CAN MEASURE THIS AGE????

ilavilla@unaves

