

DIALYSIS WITHDRAWAL: CAUSE OF MORTALITY ALONG A DECADE (2004-2014)

M. Ortiz, C. Mon, JC. Herrero, O.Ortega, I.Rodríguez, P. Gallar, A. Oliet M. Sánchez, Rosa. Camacho, A. Vigil. Hospital Severo Ochoa. Madrid. Spain.

INTRODUCTION:

- -More advanced age and comorbidity of patients starting dialysis makes dialysis withdrawal more frequent among nephrologists.
- -In Spanish renal patient registers, no mention is made to the mortality associated with dialysis withdrawal.
- -In international registers (Canadian Register, USRDS,...), high mortality for this cause (close to 25%) has been recognized for years. In most of these registers, there are not distinction between death caused by dialysis withdrawal and death caused by the illness that was the reason of dialysis withdrawal.

OBJECTIVES:

Studying mortality in our dialysis unit between 2004 and 2014, focusing on the role of dialysis withdrawal.

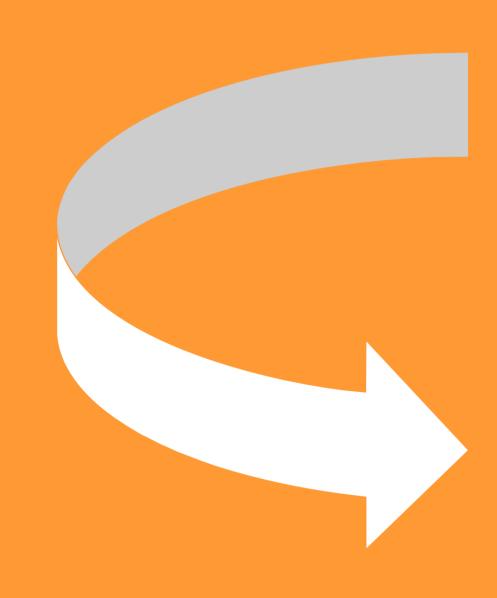
MATERIAL AND METHODS:

- -Retrospectively, we collected mortality data on our dialysis unit for 10 years.
- -During this period, 215 patients died.
- -Clinical, biochemical (analytical closer to the date of exitus, one month before as much) and causes of death were analyzed.
- -Death by dialysis withdrawal was defined as that which occurred 72 hours after the last dialysis.
- -Cachexia was defined as asthenia and progressive weight loss.

RESULTS:

-Dialysis withdrawal was proposed to 110 (51.2%) patients, 101 (46%) accepted. It was responsible for the death in 23% of cases (23 patients), 10.65% of overall mortality. The others (78 patients) died by the processes that conditioned its withdrawal.

-Univariate study (table)



	* * * *	14/TTL155 414/ 41	1.1-2
	NO	WITHDRAWAL	Univariate
	WITHDRAWAL		analysis.
N	114	101 (46%)	
Age (years)	67,9±11.6	73.47±10.88	P<0,000
Sex (males)	60,5%	51,5	N5
Cachexia	9,2%	87,9%	5
DW	40,4%	40,4%	N5
ICCh (Comorbidity	5,13±2	5,24±2,1	N5
index of Chalson)			
Time on dialysis	54±55	62,8±67	N5
(months)			
Heart disease	67,5%	60,6%	N5
Peripheral Vascular	41,1%	37,4%	N5
Disease			
Cerebrovascular	30,7%	30,3%	N5
Disease			
Neoplasia	19,3%	25,3%	N5
Hemoglobin	10,6±1,9	10±1,6	P:0,03
C-reactive protein	81,4±89,4	119±104	P:0.006
Ferritin	427,7±335,6	773±1013	P:0,002
Transferrin	148,6±49,55	125±35	P:0,000
Exitus Cardiovascular	29%	27%	N5
Exitus infection	17,5%	12%	N5
Exitus cachexia	9,2%	20%	P<0,001

- -Caquexia was the only factor significatively higher as cause of death in patients whom dialysis withdrawal was proposed.
- -In the logistic regression analysis, factors associated with dialysis withdrawal were: more advanced age, cachexia and higher ferritin levels.

CONCLUSIONS:

- -Dialysis Withdrawal is an approach increasingly used in patients under dialysis because of more advanced age and comorbidity.
- -Most patients died because of the processes that conditioned the dialysis withdrawal, not by withdrawal dialysis.
- -Death by dialysis withdrawal was 10.65% of overall mortality (only 23% of patient whom was proposed).
- -The withdrawal was mainly performed in elderly and cachectic patients with analytical data of malnutrition-inflammation.
- -Patients who did not accepted dialysis withdrawal (9) died before two months after the proposal.

REFERENCES:

- -US Renal data System. USRD 2012 Annual Data Reports:Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the United States. 2012
- -Murphy E et al. International variation in classification of dialysis withdrawal: a systematic review. NDT (2014) 29:625-635.
- -An uptodate on renal replacement therapy in Europe: ERA-EDTA Registry from 1997 to 2006.NDT data 2009, 24:3557-3566.
- -A.Rodriguez Jornet et al. Pacientes con IRC terminal retirados de diálisis bajo protocolización. Nefrología XXI,2 (2001): 151-159.)
- -Holley, Davidson and Moss. Nephrologist changuing practices in reported end-of-life decision-making. Clinical Journal of The American Journal Of Nephrology,2 (2007):107-111.
- -Birmele B et al. *Death after withdrawal from dialysis: The most common cause of death in a French dialysis population*. NDT (2004) 19:686-691.







