

Table 1. Baseline clinical characteristics of 129 incident dialysis patients.

	Total	Serum ferritin level (Median: 82 ng/mL)		P-value
		High-ferritin group (ferritin > median)	Low-ferritin group (ferritin ≤ median)	
Patient number	129	64	65	
Male (%)	84 (65.1)	50 (78.1)	34 (52.3)	0.002*
Age (years)	58.8±11.0	57.7±11.8	59.7±10.1	0.52
Body mass index (kg/m ²)	22.1±3.9	22.3±3.5	21.8±4.3	0.26
Diabetes mellitus (%)	63 (48.8)	31 (48.4)	32 (49.2)	0.93
Smoking (%)				
History of smoking	71 (55.0)	42 (65.6)	29 (44.6)	0.016*
➤ Current	27 (20.9)	12 (18.8)	15 (23.1)	0.54
➤ Ex-smokers	44 (34.1)	30 (46.9)	14 (21.5)	0.002*
Medication (%)				
ACE-I/ARBs	85 (65.9)	37 (57.8)	48 (73.9)	0.05
Statins	42 (32.6)	20 (31.3)	22 (34.9)	0.66
Vitamin D	73 (56.6)	34 (53.1)	39 (60.0)	0.43
ESAs	108 (83.7)	50 (80.7)	58 (89.2)	0.17
IV iron supplementation [†]	18 (14.6)	12 (19.4)	6 (9.8)	0.13
Oral iron supplementation ^{††}	15 (12.1)	10 (16.1)	5 (8.1)	0.16
Malnutrition (%)				0.23
SGA category B (Mildly-Moderately)	77 (59.7)	33 (55.0)	44 (68.8)	

SGA category C (Severely)	19 (14.7)	12 (20.0)	7 (10.9)	
History of CVD	33 (25.6)	16 (25.0)	17 (26.2)	0.88
Modality of dialysis				0.98
Hemodialysis (%)	121 (93.8)	60 (93.8)	61 (93.9)	
Peritoneal dialysis (%)	8 (6.2)	4 (6.3)	4 (6.2)	
CV catheter usage (%; HD)	16 (13.2)	11 (18.3)	5 (8.2)	0.10

* Differences were statistically significant with $P < 0.05$. † N = 123, †† N = 124

Abbreviations: ACE-I/ARBs, angiotensin converting enzyme inhibitor/angiotensin II receptor blockers; ESAs, erythropoiesis stimulating agents; IV, intravenous; SGA, subjective global assessment; CVD, cardiovascular disease; CV, central venous; HD, hemodialysis.

Table 2. Baseline values for laboratory biomarkers in 129 incident dialysis patients.

	Total	Serum ferritin level (Median: 82 ng/mL)		P-Value
		High-ferritin group (ferritin > median)	Low-ferritin group (ferritin ≤ median)	
Hemoglobin (g/dL)	8.8±1.3	8.7±1.5	9.0±1.2	0.27
Hematocrit (%)	27.0±4.3	26.5±4.6	27.5±3.8	0.15
White blood cell (×10 ³ /mm ³)	6.0±1.9	6.3±2.0	5.8±1.8	0.12
Platelet (×10 ³ /mm ⁴)	21.4±6.1	21.4±6.6	21.5±5.7	0.50
Albumin (g/dL)	3.5±0.5	3.4±0.5	3.5±0.5	0.33
Total cholesterol (mg/dL)	165.5±42.5	158.2±43.2	173.0±40.8	0.046*
HDL cholesterol (mg/dL)	45.8±14.9	42.4±12.8	49.0±16.1	0.01*
Uric acid (mg/dL)	8.1±1.9	8.1±2.2	8.1±1.6	0.69
Intact PTH (pg/mL)	320±246	297±218	342±271	0.51
Ferritin (ng/mL)	82 (44.5-186)	186 (124.5-275.8)	45 (34-63.5)	<0.0001*
CRP (mg/dL)	0.103 (0.03-0.51)	0.24 (0.05-0.94)	0.09 (0.02-0.26)	0.0035*
IL-6 (pg/mL)	3.22 (1.94-6.27)	3.39 (2.52-7.59)	2.87 (1.55-4.69)	0.039*

Data are shown as mean ± SD or as median (interquartile range). * Differences were statistically significant with P < 0.05.

Abbreviations: HDL, high-density lipoprotein; PTH, parathyroid hormone; CRP, C-reactive protein; IL-6, interleukin-6.

Table 3. Relative risks and 95% confidence interval (95%CI) for predictive factors of hospitalization due to infection.

Parameter	Relative risk (95% CI)	P-value
Unadjusted		
log ferritin	1.51 (1.06 to 2.17)	0.024*
log CRP	1.03 (0.84 to 1.27)	0.74
log IL-6	1.22 (0.87 to 1.74)	0.26
SGA, Category B and C	2.59 (0.92 to 10.80)	0.07
Adjusted		
<i>Model 1</i>		
log ferritin	1.47 (1.00 to 2.13)	0.049*
Age	1.00 (0.98 to 1.05)	0.55
Gender, man	1.79 (0.84 to 4.28)	0.13
<i>Model 2</i>		
log ferritin	1.57 (1.04 to 2.38)	0.031*
log CRP	0.92 (0.73 to 1.15)	0.48
log IL-6	1.10 (0.76 to 1.61)	0.63
<i>Model 3</i>		
log ferritin	1.60 (1.07 to 2.40)	0.022*
log CRP	0.91 (0.72 to 1.13)	0.40
log IL-6	1.05 (0.73 to 1.55)	0.79
SGA, Category B and C	2.74 (0.92 to 12.0)	0.07

Unadjusted relative risks (RR) and adjusted RR were calculated using the Cox proportional hazards model.

Model1; adjusted by age, gender and log ferritin

Model2; adjusted by age, gender, log ferritin, log CRP and log IL-6

Model3; adjusted by age, gender, log ferritin, log CRP, log IL-6 and SGA

* Differences were statistically significant with $P < 0.05$. Abbreviations: CRP, C-reactive protein; IL-6, interleukin-6; SGA, subjective global assessment; CI, confidence interval.