

InBody s10

Fluid Management in Dialysis Patients



InBody Body Water

ID	Height	Age	Gender	Test Date / Time
	159cm	53	Male	2017.09.30. 13:58

Body Water Composition

	Under	Normal	Over
TBW Total Body Water (L)	32.2		
ICW Intracellular Water (L)	18.5		
ECW Extracellular Water (L)	13.7		

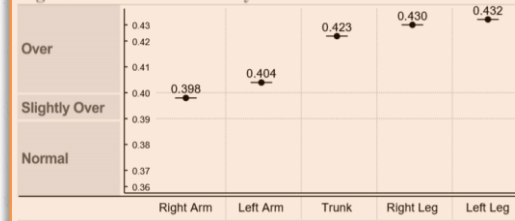
ECW Ratio Analysis

	Under	Normal	Over
ECW Ratio	0.424		

Segmental Body Water Analysis

	Under	Normal	Over
Right Arm (L)	1.53		
Left Arm (L)	1.78		
Trunk (L)	14.0		
Right Leg (L)	5.32		
Left Leg (L)	5.12		

Segmental ECW Ratio Analysis



Body Water Composition History

Parameter	11/26/17	12/02/17
Weight (kg)	53.9	53.5
TBW Total Body Water (L)	30.4	32.2
ICW Intracellular Water (L)	18.3	18.5
ECW Extracellular Water (L)	12.1	13.7
ECW Ratio	0.399	0.424

For Low Body Weight (50 kg)

Body Composition Analysis

Protein	8.0 kg	(8.4-10.2)
Minerals	3.02 kg	(2.89-3.53)
Body Fat Mass	10.3 kg	(6.7-13.4)
Fat Free Mass	43.2 kg	(42.5-52.0)
Bone Mineral Content	2.55 kg	(2.39-2.92)

Muscle-Fat Analysis

Weight	53.5 kg	(47.5-53.8)
Skeletal Muscle Mass	22.2 kg	(23.5-28.7)
Soft Lean Mass	40.7 kg	(40.1-49.1)
Body Fat Mass	10.3 kg	(6.7-13.4)

Obesity Analysis

SMI	21.2 kg/m ²	(18.5-23.0)
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Water Control

ECW Ratio 0.385	-2.1 L / 51.4 kg
ECW Ratio 0.395	-1.6 L / 51.9 kg
ECW Ratio 0.405	-1.1 L / 52.4 kg

*The water control item shows the water level to be controlled based on the extracellular water ratio. This item shows the water level which varies as the extracellular water ratio is set differently according to the presence or absence of complications as described in a paper published in the 2008 Journal of the Japan Society for Dialysis Therapy (JSDT).
2008 Journal of the Japan Society for Dialysis Therapy (JSDT).

Research Parameters

Basal Metabolic Rate	1304 kcal
Visceral Fat Area	65.0 cm ²
Body Cell Mass	26.6 kg (27.8-34.0)
Arm Circumference	25.9 cm
Arm Muscle Circumference	24.1 cm
TBW/FFM	74.4 %
SMI	6.9 kg/m ²

Reactance

	RA	LA	TR	RL	LL
Xc@5 kHz	5.8	4.6	0.6	2.8	2.2
50 kHz	15.8	12.3	0.9	6.6	6.5
250 kHz	22.0	16.0	0.8	3.7	4.4

Whole Body Phase Angle

Phase Angle	2.8 °
φ(C) 50 kHz	RA LA TR RL LL
	3.1 2.8 3.3 2.3 2.1

Impedance

	RA	LA	TR	RL	LL
Z@1 kHz	310.0	285.1	17.8	179.7	185.2
5 kHz	307.5	284.0	17.6	178.2	183.9
50 kHz	282.8	252.7	16.5	170.5	177.2
250 kHz	274.3	237.3	15.3	161.0	168.1
500 kHz	264.4	228.2	14.7	155.0	165.1
1000 kHz	249.0	217.7	14.0	155.8	161.7

[Touch Type - Lying Posture]

1 Dry Weight Confirmation

- Simple evaluation of edema can be made using the ECW ratio.
- Water control provides dry weight in dialysis patients considering complications.

2 Severity Assessment

- Phase angle reflects cell integrity, nutrition status sensitively.
- Low phase angle is closely related to mortality in dialysis patients.

3 Screening Circulation Issues

- Screening potential vascular problems using difference between Right/Left ECW Ratio

4 Nutritional Assessment

- Sarcopenia Assessment
- Body Cell Mass(BCM)

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InBody Studies in Dialysis

“We found that patients who had increased blood pressure post dialysis had greater hydration status, particularly ECW.”

A Nongnuch et al.
Kidney Int. 87(2) (2015) 452-7

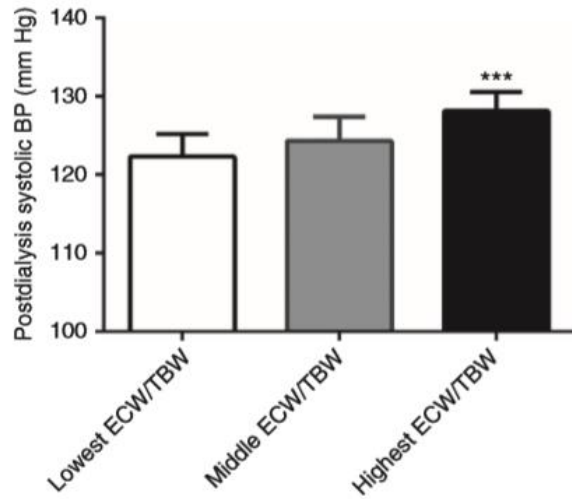


Figure 4 | Postdialysis systolic blood pressure according to predialysis tertile of extracellular water (ECW) to total body water (TBW), analyzed by multivariable multilevel modeling, adjusted for predialysis systolic blood pressure of 129.5 mm Hg and for sex, age, and diabetes. * $P < 0.001$ vs. lowest tertile.**

“Phase Angle assessed in a simple manner using BIA provides practical information to predict clinical outcomes in ESRD patients on maintenance hemodialysis.”

J. Shin et al.
Nutrition 41 (2017) 7–13

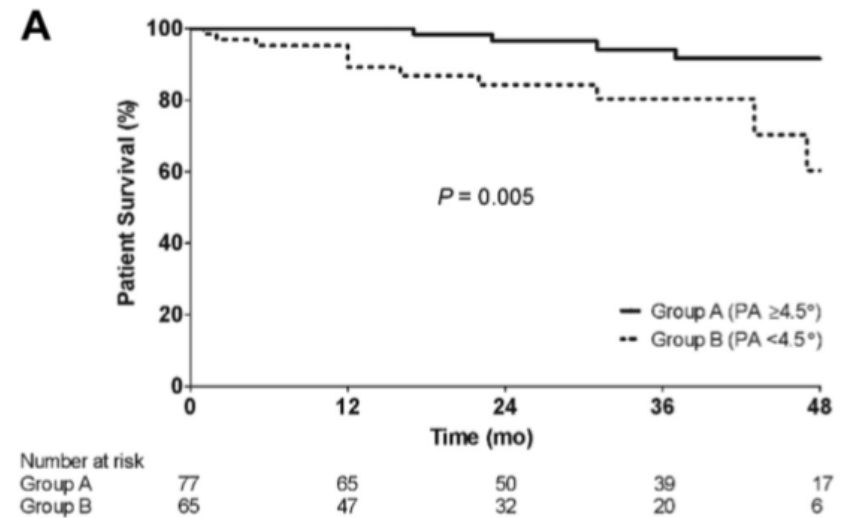


Fig. 1. Cumulative incidence of all-cause mortality, cardiovascular events, and infection according to PA group. (A) Rate of survival was higher in patients in group A than those in group B ($P = 0.005$). The 3-y survival rate was 94.1 and 80.4% in groups A and B, respectively.