

## OVERHYDRATION VS MALNUTRITION AS A PROGNOSTIC FACTOR IN PERITONEAL DIALYSIS

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- Patients on peritoneal dialysis (PD) are usually overhydrated, with the technical difficulty of managing this volume overload, especially in anuric patients.
- We carried out this work to evaluate whether overhydration and malnutrition of our patients on PD is associated with a higher incidence of complications such as peritonitis, hospitalizations and mortality.
- This is a retrospective study that evaluates the measurement by multifrequency electrical Bioimpedance (BIE) made with Fresenius Medical Care Body Composition Monitor equipment in the patients of our PD service, relating the phase angle (PA) as a marker of malnutrition and overhydration (OH) defined as those patients who present a water overload greater than 2.5% of their body weight at the time of consultation.
- N: 31 patients were evaluated, 19 of them women, with an average age of 53 years

	PA<4,5 n16	PA>4,5 n15	p
Albumin <3.5 g/dl	6	1	0.012
Sodium <135 meq/l	8	4	0.084
Parathormone <150 ng/dl	2	0	0.065
Hospitalization	7	5	0.27
Peritonitis	4	4	0.45
Phosphorus <4 mg/dl	2	1	0.28
Mortality	1	0	0.15
Diabetes	4	3	0.36
Phosphorus >5,5 mg/dl	7	7	0.43
Parathormone >1000 ng/dl	4	0	0.01
OH >2,5%	13	5	0.001

	OH>2,5%n 18	OH<2,5%n13	p
Albumin <3.5 g/dl	6	1	0.027
Sodium <135 meq/l	9	3	0.052
Parathormone <150 ng/dl	2	0	0.067
Hospitalization	10	2	0.005
Peritonitis	7	1	0.011
Phosphorus <4 mg/dl	2	1	0.37
Mortality	1	0	0.15
Diabetes	6	1	0.027
Phosphorus >5,5 mg/dl	9	5	0.26
Parathormone >1000 ng/dl	2	2	0.36
PA<4,5	13	3	0.001

PA: phase angle      OH: overhydration

- A PA less than 4.5 was statistically significant associated with an albumin value <3.5 mg/dl. No impact was observed on clinical indices such as peritonitis, hospitalizations or mortality.
- When the hydration status was compared within this group, it was observed that these patients were more frequently overhydrated with statistical significance.
- When we analyzed the different variables correlating them with OH, we observed a significant relationship with albumin <3.5 mg/dl, a greater number of hospitalizations and episodes of peritonitis.
- These overhydrated patients were more frequently diabetic and with PA less than 4.5.

**Conclusion:** In our patients, OH was associated with a higher risk of hospitalization and peritonitis. Moreover, it was also observed that these patients were more frequently diabetic with hypoalbuminemia and PA <4.5 as markers of malnutrition.