

# PLASMA GHRELIN LEVELS IN PERITONEAL DIALYSIS PATIENTS

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Ghrelin, predominantly secreted by the fundus of stomach, is an orexigenic hormone with appetite increasing and growth hormone secretory actions. In this study, by measuring serum ghrelin levels in PD patients, it was aimed to evaluate its relationship with nutritional status, depressive symptoms and clinical and laboratory markers.

## Study design and subjects

The study included 87 peritoneal dialysis (PD) patients. Serum ghrelin levels, demographic and laboratory data of the patients were evaluated. Beck Depression Inventory, and malnutrition inflammation score (MIS) was performed in all patients and their relationship with ghrelin was evaluated.

## Results

The mean serum ghrelin level was  $7.66 \pm 4.20$  pg / ml, and this value was found to be higher than the value reported in the literature for healthy individuals. No significant relationship between ghrelin levels and BMI, MIS and the Beck depression scores could be detected. No significant relationship was detected between ghrelin levels and depressive findings obtained from Beck Depression Inventory. The mean serum ghrelin levels in patients using amino acid-containing solutions were higher than non-users ( $p = 0.004$ ). Similarly the serum ghrelin levels of the patients using Icodextrin-containing solutions were found to be significantly higher than non-users ( $p = 0.02$ ). (Table)

Solution type	Ghrelin level(ng/mL)		p
	Mean±SD		
Aminoasid	User (n)	Non-user (n)	0.004
	10.17±7.56(18)	7.0±2.44(69)	
Icodextrin	8.69±5.04(44)	6.61±2.8(43)	0.02

## Discussion

Serum ghrelin levels rise in PD patients. There are multiple parameters that affect the level of serum ghrelin. In our relatively homogeneous study group comprised of mostly patients with high BMI, significant relationship were not detected between ghrelin and malnutrition, depressive symptoms, BMI and other laboratory markers.

