

TOTAL GHRELIN AND ACYLGHRELIN DETERMINANTS IN HEMODIALYSIS PATIENTS



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INTRODUCTION AND AIMS

METHODS

INTRODUCTION: Ghrelin is an orexigenic hormone which has an additional effect on inflammation and the cardiovascular system in the general population and also in hemodialysis (HD) patients. It is not clear which parameters influence the total levels of ghrelin and acylghrelin in HD patients.

AIMS: To evaluate ghrelin and acyl ghrelin determinants in HD patients.

- cross-sectional study that included 88 HD patients, mean age of 61.1±13.5 years, 20% diabetic.
- We followed acyl ghrelin/ghrelin correlations with inflammatory, nutrition and lipid markers and subsequently we determined the strongest predictor for the level of these molecules.

RESULTS

Parameters	Correlations	The strongest predictor	Parameters	Correlations	The strongest predictor
GHRELIN	Triglycerides $(r = 0.31, p = 0.004)$	IL-1 β (p <0.001) 95% CI (0,000-0,015)		Total cholesterol (r =0.36, p=0.001)	
	Total cholesterol (r = 0.23,			LDL-cholesterol (r =0.39, p<0.001)	
	p = 0.03) Interleukin 1 beta (IL-1 β) (r = 0.88, p < 0.0001)		ACYL GHRELIN	Sodium bicarbonate (r =0.31, p = 0.004)	Total cholesterol (p =0.038)
				Body mass index (r =0.24, p=0.03)	95% CI (0,003-0,004)
	Kt/V (r =0.25, p=0.02).			Lean tissue mass (r = -0.29, p =0.008)	
				Fat tissue index (r=0.28, p=0.009).	

CONCLUSIONS

CONCLUSIONS: In our HD patients the strongest predictor of total ghrelin levels was the inflammatory marker IL 1β and of acyl ghrelin levels was total cholesterol.

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