

Artículo Original

Correlation between loss of lean mass and quality of life in cancer patients

Relación entre la pérdida de masa magra y la calidad de vida en pacientes con cáncer

Sánchez Sánchez, Eduardo^{1,2,3}; López Aliaga, Inmaculada^{1,2}; Montes Romero, Ana Belén³; Alférez, María J.M.^{1,2}

¹ Department of Physiology, University of Granada, Granada, Spain.

² Institute of Nutrition and Food Technology "José Mataix Verdú", University of Granada, Granada, Spain.

³ Hospital Punta Europa, Algeciras, Spain.

Introduction: Weight loss and especially the loss of lean mass, can lead into losing own self-esteem, due to body changes suffered in the event of malnutrition and the progressive dependence of relatives and/or carers, making the oncological patient to perceive their health state in a negative way.

Objective: The aim of this study was to identify the relationship or association between the loss of lean mass and the quality of life in patients with cancer.

Results: Of the total sample only 197 ends with the study. The results revealed that there was a positive correlation in pre- and post-treatment, although this was not significant in most cases ($\rho < 0.63$). In addition, the results were obtained through the application of Chi-square approach, did on the quality of life of the patient, in addition to the differentiation between the categories in which the problem was subdivided ($P < 0.05$).

Methods: A longitudinal and prospective study was performed in 231 oncologic patients undergoing radiotherapy treatment. Sociodemographic, clinical, anthropometric and life-quality variables were measured, evaluated and collected by means of the Health-Related Quality of Life (EORTC-QLQ c30) questionnaire.

Table 2. Correlation between loss of lean mass and quality of life.

	X ²	df	p-value
Physical sphere	1.41	1	0.23
Digestive symptoms	0.32	1	0.56
Cognitive sphere	1.24	1	0.26
Social sphere	1.26	1	0.26
Global health	0.35	1	0.55
Quality of life	0.17	1	0.68

X²: Chi-squared test, df: degree of freedom.

Table 1. Quality of life scores according to QLQ-C30.

	Score range		Admission day		Discharge day		rho	p-value
	Absolutely	A lot	X	SD	X	SD		
Physical sphere	14	56	16.95	4.91	16.89	5.34	0.63	<0.05
Digestive symptoms	5	20	5.74	1.43	5.89	1.76	0.41	<0.05
Cognitive sphere	6	24	9.38	2.93	10.07	4.06	0.58	<0.05
Social sphere	3	12	3.47	1.40	3.64	1.66	0.63	<0.05
	Low	High	X	SD	X	SD	rho	p-value
Global health	1	7	5.27	1.29	5.63	1.20	0.45	<0.05
Quality of life	1	7	5.23	1.36	5.62	1.36	0.47	<0.05

X: mean, SD: standard deviation, rho: Spearman correlation.

Figure 2. Questionnaire QLQ c30 results in patients without loss of lean mass (%).

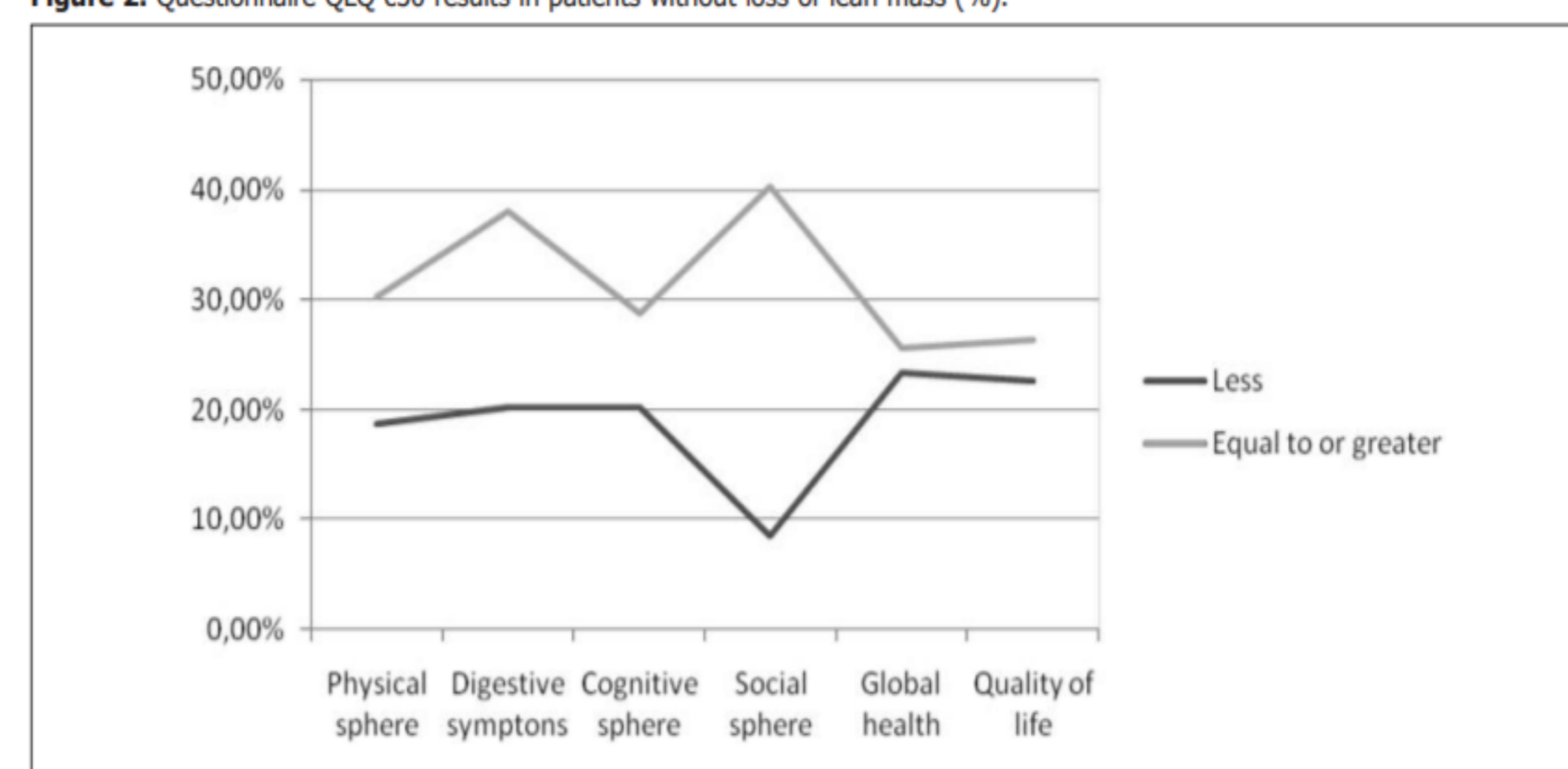
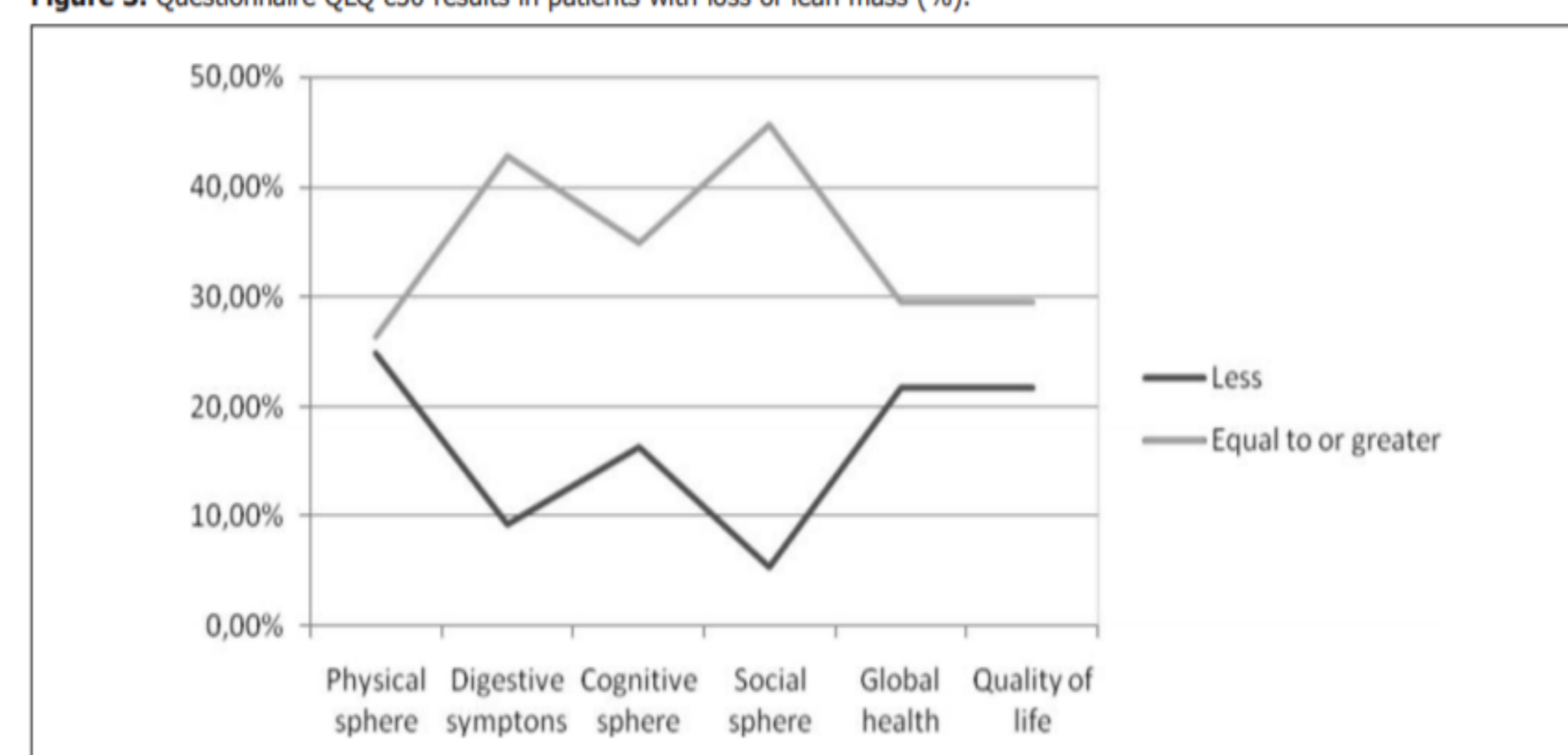


Figure 3. Questionnaire QLQ c30 results in patients with loss of lean mass (%).



Conclusions: The loss of lean mass, without considering other health conditions or effects, did not prove to be detrimental to the quality of life of the patient. HRQoL is a multi-dimensional concept.