

PRESENTATION NUMBER: O107.10

GERD QUESTIONNAIRES AND HEALTH RELATED QUALITY OF LIFE QUESTIONNAIRES IN OBESE PATIENTS. DO THEY REALLY REFLECT THE SEVERITY OF THE DISEASE?

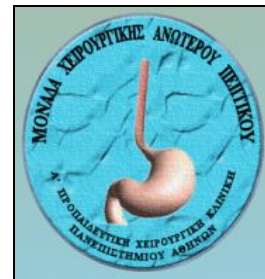


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**O107.10 : GERD QUESTIONNAIRES AND HEALTH RELATED
QUALITY OF LIFE QUESTIONNAIRES IN OBESE PATIENTS.
DO THEY REALLY REFLECT THE SEVERITY OF THE
DISEASE?**

DISCLOSURE INFORMATION

Presenting Author: No conflicts of interest to declare

Co-Authors: Declare no conflict of interest

INTRODUCTION

- Correlation between GERD and obesity
 - GERD among obese up to 40%
 - Uncertain mechanism
 - Epidemic health concern for obesity →
- further investigation of GERD
in obese patients



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TOPIC HIGHLIGHT

Michele Cicala, MD, Professor, Series Editor

Gastro-esophageal reflux disease and obesity, where is the link?

Sara Emerenziani, Maria Paola Rescio, Michele Pier Luca Guarino, Michele Cicala

Table 1 Proposed mechanisms by which abdominal obesity causes reflux

Mechanical factors	Increased intra-gastric and gastro-esophageal pressure gradient Increased risk of Hiatal Hernia Increased sensitivity to distension-induced TLESR Decreased lower esophageal sphincter pressure
Humoral factors	Increased level of adipocytokines including interleukin 6 and tumor necrosis factor α
Motility disorders	Delayed gastric emptying rate and delayed esophageal clearing time

OBJECTIVE OF THE STUDY

To assess the value of GERD questionnaires in reflux estimation as preoperative screening in obese patients who will undergo bariatric surgery

GERD score

Diseases of the Esophagus (2000) 13, 265-270
© 2000 ISDE/Blackwell Science Asia

**DISEASES OF THE
ESOPHAGUS**

Original Article

Reproducibility, validity, and responsiveness of a disease-specific symptom questionnaire for gastroesophageal reflux disease

C. J. Allen¹, K. Parameswaran¹, J. Belda¹, M. Anvari²

Departments of ¹Medicine and ²Surgery, St Joseph's Hospital and McMaster University, Hamilton, Ontario, Canada

- 6 questions on specific GERD symptoms
- Severity (0-3) and frequency (0-4)
- Preoperatively and during 6-month follow-up
- Few atypical (only cough) or extra-esophageal symptoms

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GERD-HRQL questionnaire

- 11 questions
- Assesses overall QOL
- Symptom severity (0-5 scale)
- Typical symptoms
- Self-assessed

J Am Coll Surg. 1996 Sep;183(3):217-24.

Quality of life scale for gastroesophageal reflux disease.

Velanovich V¹, Vallance SR, Gusz JR, Tapia FV, Harkabus MA.

Arch Surg. 2004 Jun;139(6):621-5; discussion 626.

Using quality-of-life measurements to predict patient satisfaction outcomes for antireflux surgery.

Velanovich V.

Scale		
0. No symptoms		
1. Symptoms noticeable, but not bothersome		
2. Symptoms noticeable and bothersome, but not every day		
3. Symptoms bothersome everyday		
4. Symptoms affect daily activities		
5. Symptoms are incapacitating- unable to do daily activities		
Questions		
1. How bad is your heartburn?		
2. Heartburn when lying down?		
3. Heartburn when standing up?		
4. Heartburn after meals?		
5. Does heartburn change your diet?		
6. Does heartburn wake you from sleep?		
7. Do you have difficulty swallowing?		
8. Do you have pain with swallowing?		
9. Do you have gassy or bloating feelings?		
10. If you take medication, does it affect your daily life?		
How satisfied are you with your present condition?		
<input type="checkbox"/> Satisfied	<input type="checkbox"/> Neutral	<input type="checkbox"/> Dissatisfied

EORTC- QLQ C30



In 1986, the European Organization for Research and Treatment of Cancer (EORTC) Study Group on Quality of Life initiated a research program (EORTC protocol 15861)

- Designed to assess quality of life in patients with cancer

→ chronic health impairment

- 30 questions: several everyday aspects of life (functional-symptom-QOL scales)

- The patient scores his own QOL in a scale from 0-7

1993 Vol: 85:365-376. DOI: 10.1093/jnci/85.5.365

The European Organization for Research and Treatment of Cancer QLQ-C30: a quality-of-life instrument for use in international clinical trials in oncology. J Natl Cancer Inst

Aaronson NK, Ahmedzai S, Bergman B, Bullinger M, Cull A, Duez NJ, Filiberti A, Flechtner H, Fleishman SB, de Haes JC

In 1986, the European Organization for Research and Treatment of Cancer (EORTC) initiated a research program to develop an integrated, modular approach for evaluating the quality of life of patients participating in international clinical trials.

Surgical Endoscopy And Other Interventional Techniques
February 2005, Volume 19, Issue 2, pp 257-261

Date: 09 Dec 2004

Psychometric documentation of a quality-of-life questionnaire for patients undergoing antireflux surgery (QOLARS)

Zs. Zéman, S. Rózsa, T. Tihanyi, E. Tarkó

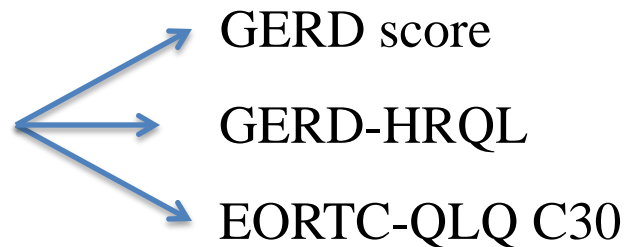
PATIENTS AND METHODS

- 23 consecutive obese patients, assessed during their preoperative evaluation

	TOTAL (n=23)	GERD (n=7)	NON-GERD (n=16)	P
Age (ys)	39.30	40.71	38.68	0.635
BMI (kg/m ²)	46.57	49.44	45.32	0.238
Male	5	1	4	0.567
Female	18	6	12	

- Detailed GERD history

- Questionnaires



- 24h MIIpH (catheter ZAI BG 44, Sandhill Scientific, 2 pH sensors probe)

DeMeester score and detailed GERD history

GERD existence according to DeMeester score= 7/23

		DeMeester score	
		GERD (n=7)	NON-GERD (n=16)
GERD symptoms	SYMPTOMATIC	2	7
	ASYMPTOMATIC	5	9

RESULTS

	TOTAL (n=23)	GERD (n=7)	NON-GERD (n=16)	P
GERD score (mean)	10.75	11.00	10.61	0.937
GERD-HRQL (mean)	4.59	5.14	4.33	0.745
Functional EORTC-30 scale	74.64	80.31	72.00	0.378
Symptom EORTC- 30 scale	22.37	19.04	23.93	0.525
Global EORTC-30 scale	51.89	60.71	46.77	0.202

Univariate analysis revealed:

- Age, BMI and sex do not correlate with DeMeester score
(p=0.304, 0.134 and 0.857, respectively)
- GERD score and GERD-HRQL do not correlate with DeMeester score
(p= 0.088 and 0.101, respectively)
- No correlation exists between DeMeester score and functional, symptom or global EORTC- QLQ C30 scales.
(p=0.454, 0.271 and 0.546, respectively)

Multivariate analysis adjusted for age, sex and BMI revealed:

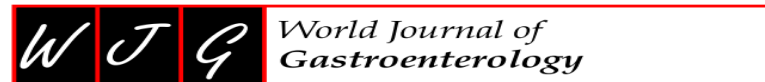
No correlation between DeMeester score and GERD score, GERD-HRQL or EORTC- QLQ C30 scales

Impedance correlations

- All reflux **recumbent distal** activity correlates with GERD score and GERD-HRQL.
($p=0.002$ and $p<0.001$, respectively)
- All reflux **recumbent proximal** activity correlates with GERD-HRQL.
($p<0.001$)
- Multivariate analysis adjusted for age, sex and BMI revealed that GERD-HRQL score is an independent prognostic factor of all reflux recumbent distal and proximal activity.
($p<0.001$ and $p=0.001$, respectively)
- Multivariate analysis adjusted for age, sex and BMI revealed that GERD score is an independent prognostic factor of all reflux recumbent distal activity.
($p=0.004$)

DISCUSSION

- Need for cheap, reliable and reproducible prognostic tools
- Tailoring of bariatric procedures
- GERD: obesity-related co morbidity
- Low sensitivity and specificity of GERD symptoms in obese (Limitation: small population)
- This may indicate that GERD does not affect quality of life of obese patients
- GERD score, GERD-HRQL and EORTC-QLQ C30: not reliable GERD screening tests in a population of obese patients
- pH study may be indicated preoperatively



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TOPIC HIGHLIGHT

Marco G Patti, MD, Professor, Director, Series Editor

**Gastroesophageal reflux disease and severe obesity:
Fundoplication or bariatric surgery?**

Vivek N Prachand, John C Alverdy

ISDE

The International Society for
Diseases of the Esophagus

14th World Congress

of the International Society for Diseases of the Esophagus
September 22-24, 2014
Vancouver, Canada

THANK YOU

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– Triantafyllou S.