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
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

- 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
GERD-HRQL questionnaire

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

Quality of life scale for gastroesophageal reflux disease.

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

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

Velanovich V
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
- 30 questions: several everyday aspects of life (functional-symptom-QOL scales)
- The patient scores his own QOL in a scale from 0-7
PATIENTS AND METHODS

- 23 consecutive obese patients, assessed during their preoperative evaluation

<table>
<thead>
<tr>
<th></th>
<th>TOTAL (n=23)</th>
<th>GERD (n=7)</th>
<th>NON-GERD (n=16)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (ys)</td>
<td>39.30</td>
<td>40.71</td>
<td>38.68</td>
<td>0.635</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>46.57</td>
<td>49.44</td>
<td>45.32</td>
<td>0.238</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>0.567</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>6</td>
<td>12</td>
<td></td>
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</table>

- Detailed GERD history

- Questionnaires
  - GERD score
  - GERD-HRQL
  - EORTC-QLQ C30

- 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

<table>
<thead>
<tr>
<th>GERD symptoms</th>
<th>GERD (n=7)</th>
<th>NON-GERD (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYMPTOMATIC</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>ASYMPTOMATIC</td>
<td>5</td>
<td>9</td>
</tr>
</tbody>
</table>
RESULTS

Multivariate analysis adjusted for age, sex and BMI revealed:

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

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)

<table>
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<th>GERD (n=7)</th>
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<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERD score (mean)</td>
<td>10.75</td>
<td>11.00</td>
<td>10.61</td>
<td>0.937</td>
</tr>
<tr>
<td>GERD-HRQL (mean)</td>
<td>4.59</td>
<td>5.14</td>
<td>4.33</td>
<td>0.745</td>
</tr>
<tr>
<td>Functional EORTC-30 scale</td>
<td>74.64</td>
<td>80.31</td>
<td>72.00</td>
<td>0.378</td>
</tr>
<tr>
<td>Symptom EORTC-30 scale</td>
<td>22.37</td>
<td>19.04</td>
<td>23.93</td>
<td>0.525</td>
</tr>
<tr>
<td>Global EORTC-30 scale</td>
<td>51.89</td>
<td>60.71</td>
<td>46.77</td>
<td>0.202</td>
</tr>
</tbody>
</table>
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
THANK YOU