

# Reflux ziekte



## Aanpak in diagnostiek Refractaire reflux

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18 NOV 2015

# Reflux - diagnostiek



- **Niet steeds klassiek**
  - 60% van de patiënten met oesophagitis ervaren zuurbranden
  - Barrett aanwezig: 30% geen symptomen
  - Klassieke versus atypische symptomen  
(HEESHEID, HOEST, LARYNGITIS,...)

# Reflux - diagnostiek



## Guidelines for the Diagnosis and Management of Gastroesophageal Reflux Disease

Philip O. Katz, MD<sup>1</sup>, Lauren B. Gerson, MD, MSc<sup>2</sup> and Marcelo F. Vela, MD, MSCR<sup>3</sup>

*Am J Gastroenterol* 2013; 108:308–328; doi:10.1038/ajg.2012.444; published online 19 February 2013

### Table 1. Summary and strength of recommendations

#### *Establishing the diagnosis of Gastroesophageal Reflux Disease (GERD)*

1. A presumptive diagnosis of GERD can be established in the setting of typical symptoms of heartburn and regurgitation. Empiric medical therapy with a proton pump inhibitor (PPI) is recommended in this setting. (Strong recommendation, moderate level of evidence)
2. Patients with non-cardiac chest pain suspected due to GERD should have diagnostic evaluation before institution of therapy. (Conditional recommendation, moderate level of evidence). A cardiac cause should be excluded in patients with chest pain before the commencement of a gastrointestinal evaluation (Strong recommendation, low level of evidence)
3. Barium radiographs should not be performed to diagnose GERD (Strong recommendation, high level of evidence)
4. Upper endoscopy is not required in the presence of typical GERD symptoms. Endoscopy is recommended in the presence of alarm symptoms and for screening of patients at high risk for complications. Repeat endoscopy is not indicated in patients without Barrett's esophagus in the absence of new symptoms. (Strong recommendation, moderate level of evidence)
5. Routine biopsies from the distal esophagus are not recommended specifically to diagnose GERD. (Strong recommendation, moderate level of evidence)
6. Esophageal manometry is recommended for preoperative evaluation, but has no role in the diagnosis of GERD. (Strong recommendation, low level of evidence)
7. Ambulatory esophageal reflux monitoring is indicated before consideration of endoscopic or surgical therapy in patients with non-erosive disease, as part of the evaluation of patients refractory to PPI therapy, and in situations when the diagnosis of GERD is in question. (Strong recommendation, low level of evidence). Ambulatory reflux monitoring is the only test that can assess reflux symptom association (strong recommendation, low level of evidence).
8. Ambulatory reflux monitoring is not required in the presence of short or long-segment Barrett's esophagus to establish a diagnosis of GERD. (Strong recommendation, moderate level of evidence)
9. Screening for *Helicobacter pylori* infection is not recommended in GERD patients. Treatment of *H. pylori* infection is not routinely required as part of antireflux therapy. (Strong recommendation, low level of evidence)

# Assesment of GERD



## Accuracy of the diagnosis of GORD by questionnaire, physicians and a trial of PPI treatment: the Diamond study

Diagnose GORD:

1 van de 4

Reflux oesopaghitis (LA A-D)

Oesoageal pH <4 voor > 5.5% van de tijd

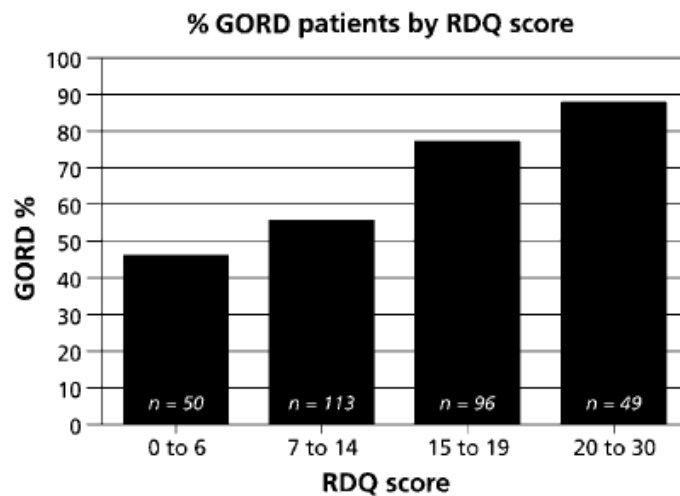
Positieve SAP ( $\geq 95\%$ ) associatie symptomen – zure reflux

Borderline hoge oesopageale zuur expusure (pH<4 voor 3.5-5.5% van tijd)  
en positieve respons op PPI

# Assesment of GERD



## Accuracy of the diagnosis of GORD by questionnaire, physicians and a trial of PPI treatment: the Diamond study

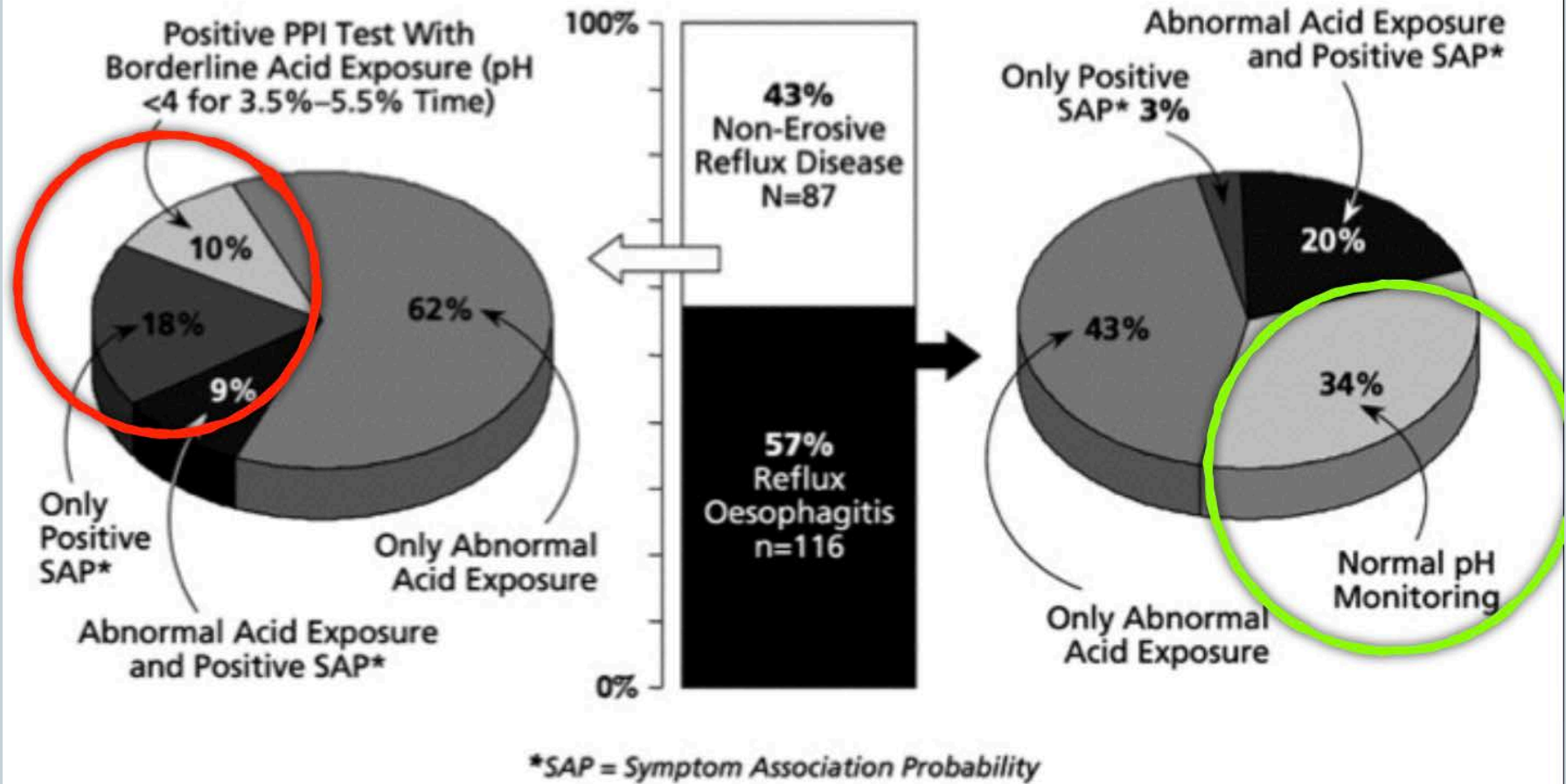


**Figure 5** Proportions of patients with gastro-oesophageal reflux disease (GORD) for four ranges of Reflux Disease Questionnaire (RDQ) scores, according to first predetermined scoring method used for analysis shown in figure 4a.

Negatieve RDQ: niet betrouwbaar

# Assesment of GERD

## 48h-pH metrie



# Assesment of GERD



- **PPI trial?**

**Positieve respons in 54% van patiënten met GORD vs 35% van patiënten zonder GORD**

**In GORD groep:**

**response to treatment: 57 % in groep erosieve GORD**

**response to treatment: 49% in groep non eros GORD**

**-> 2 weken trial Omeprazole 40 mg**

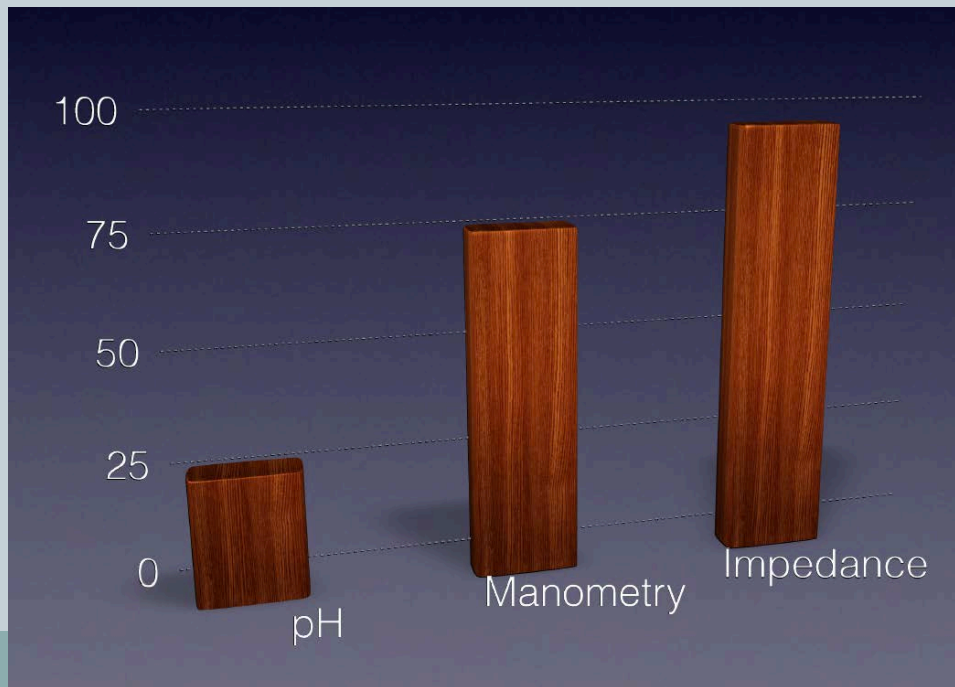
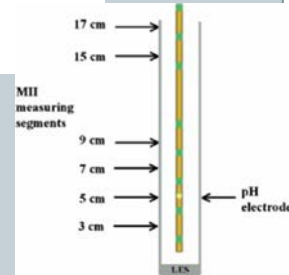
**Geen verbetering in diagnostiek**

# Assesment of GERD

Direct comparison of impedance, manometry, and pH Probe in detecting reflux before and after a meal.

Shay S<sup>1</sup>, Richter J.

19 symptomatische GERD patiënten  
en 10 'normale' vrijwilligers



All had 2-hr simultaneous manometry, pH, and Imp (six sites: 3, 5, 7, 9, 15, 17 cm above LES)

973 reflux events

Simultane detectie in 19 %

15% enkel door impedantie

Conclusie: impedantie > manometrie



# Refractaire Reflux



- **Inleiding**

- Aanhoudende refluxsymptomen na PPI gebruik
- Tot 40% falen in therapie (PPI)
- Falen van PPI behandeling: meest frequente reflux-gerelateerde klacht bij GE.

# Refractaire reflux



- **Non-responders:**
  - NERD
  - Functional heartburn

**Table 1:** Classification of patients with reflux symptoms.

Classification	Distal esophageal acid exposure	Symptom correlation	Symptom response to PPI
Erosive esophagitis	Increased	(+)	Good
Barrett's esophagus	Increased	(+)	Good
NERD			
Acid reflux related	Increased	(+)	Good
Weakly acid related	Not increased	(+)	Moderate*
Nonacid related	Not increased	(+)	Poor*
Functional heartburn	Not increased	(-)	Poor

Symptomatic response rate: 56%

Symptomatic response rate: 37%

\*Not well investigated.

Review Article

**Current Advances in the Diagnosis and Treatment of Nonerosive Reflux Disease**

Chien-Lin Chen<sup>1</sup> and Ping-I Hsu<sup>2</sup>

# Refractaire reflux



- **Definitie**
  - Moeilijk (patiënt gedreven)
  - Discussie in literatuur
    - ✦ Te weinig respons (symptomen? endoscopie?) op PPI 2x daags versus 1 x daags

# Refractaire reflux



## PPI falen – Oorzaken

- **Correcte inname (46%) (voor ontbijt – Instructies)**

- Niet voor slapen (39%)
- Niet zo nodig (4%)

Gunaratnam, Sub-optimal proton pump inhibitor dosis is prevalent in patients with poorly controlled GERD, 2006

- **Compliantie:**

- Na 1 en 6m: 55 en 30%
- Reden:

- ✦ aan/afwezigheid van symptomen
- ✦ Ernst symptomen
- ✦ Persoonlijke voorkeur wanneer medicatie te nemen

Fass, refractory GERd: what is it?, 2008

Hungin, Factors influencing compliance in long-term proton pump inhibitor therapy in general practice

- **Functionele klachten en slokdarmhypersensitiviteit:**

- 58% van non responders: functionele klachten, dus meest frequente oorzaak voor falen van therapie

# Refractaire reflux



## PPI falen – Oorzaken

- **Zwak zure of niet-zure reflux**
  - Potentieel verband met persisterende symptomen. Verschillende verklaringen
- **Residuele zure reflux:**
  - Verschillende studies tonen residuele zure reflux in patiënten met klachten Fass, Management of heartburn not responding to PPI, Gut 2009
- **Galzuur – reflux**
- **Nachtelijke zure reflux**

# Refractaire reflux



- Verandering in metabolismisme
- Resistentie aan medicatie
- Delayed healing
- H pylori
- Psychologische factoren
  - Angst en depressie verhogen GERD-related symptomen  
-> refractaire reflux – meer kans op psychosociale belasting dan mensen die goed reageren op PPI behandeling.

# Refractaire reflux



## Predispositie: Obesitas

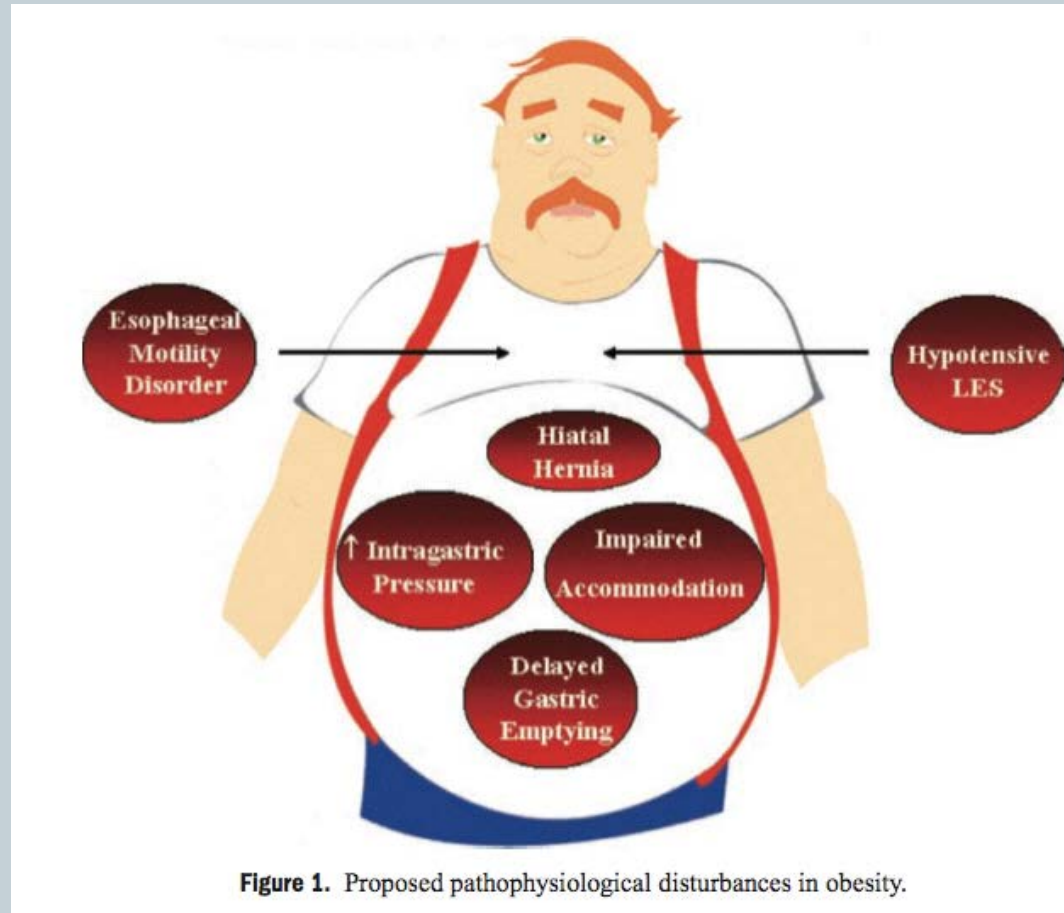


Figure 1. Proposed pathophysiological disturbances in obesity.

# Refractaire reflux



## Differentieel diagnose

- Achalasia
- Ca
- NSAIDs
- Caustische – infectieuze oorzaak oesophagitis
  - PILL INDUCED, CANDIDA, HERPES, BESTRALING



# Refractaire reflux

## Diagnostisch algoritme

