



# **IL MANAGEMENT DEL PAZIENTE REFRATTARIO ALLA TERAPIA MEDICA**

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**OSPEDALE MAGGIORE POLICLINICO, MANGIAGALLI E REGINA ELENA**

**Fondazione IRCCS - Istituto di Ricovero e Cura a Carattere Scientifico di natura pubblica**

# GASTRO-OESOPHAGEAL REFLUX DISEASE

## WHY DO PPIs FAIL?

- Symptoms still due to acid reflux
- Regurgitation as the dominant symptom
- Symptoms associated with non acid (weakly acidic) reflux
- Symptoms not due to gastro-oesophageal reflux  
(*atypical heartburn, many symptoms, depression, anxiety!!!*)



## SYMPTOMS STILL DUE TO ACID REFLUX

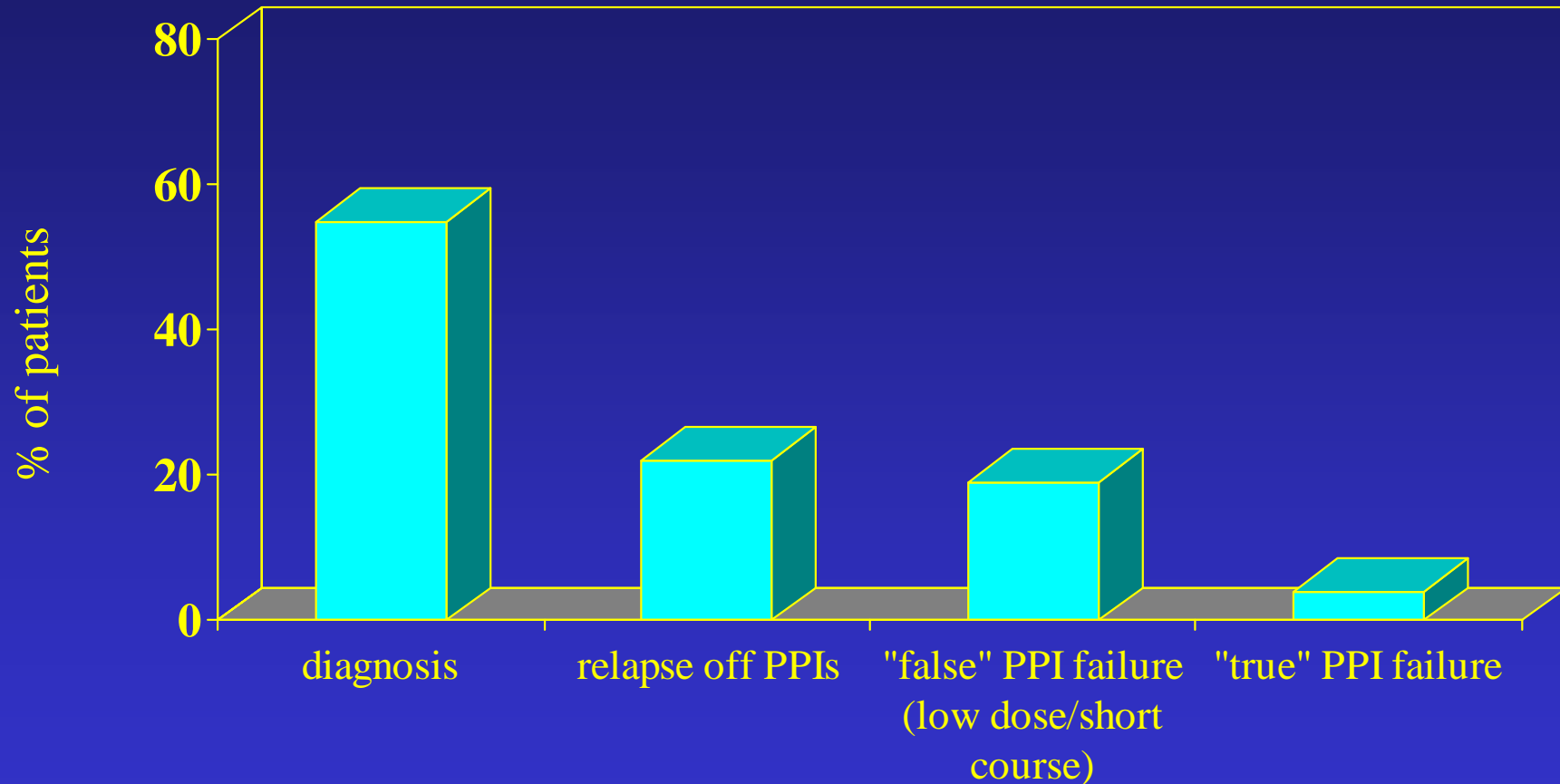
- Check compliance and adequacy of prescription!!
- Increase the dose
  - hypersensitivity to acid*
  - PPI resistance*
- Switch to another PPI (lanso 30 → esome 40, *Fass 2006*)
- Address night-time symptoms (the NAB issue)

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# REASONS FOR REFERRAL OF PTS WITH GOR SYMPTOMS IN THE OUTPATIENTS CLINIC

*Cantù et al, 2004*



**GP: inadequate prescription!**

**Patient: low compliance/ poor understanding of GORD!**

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*hypersensitivity to acid*

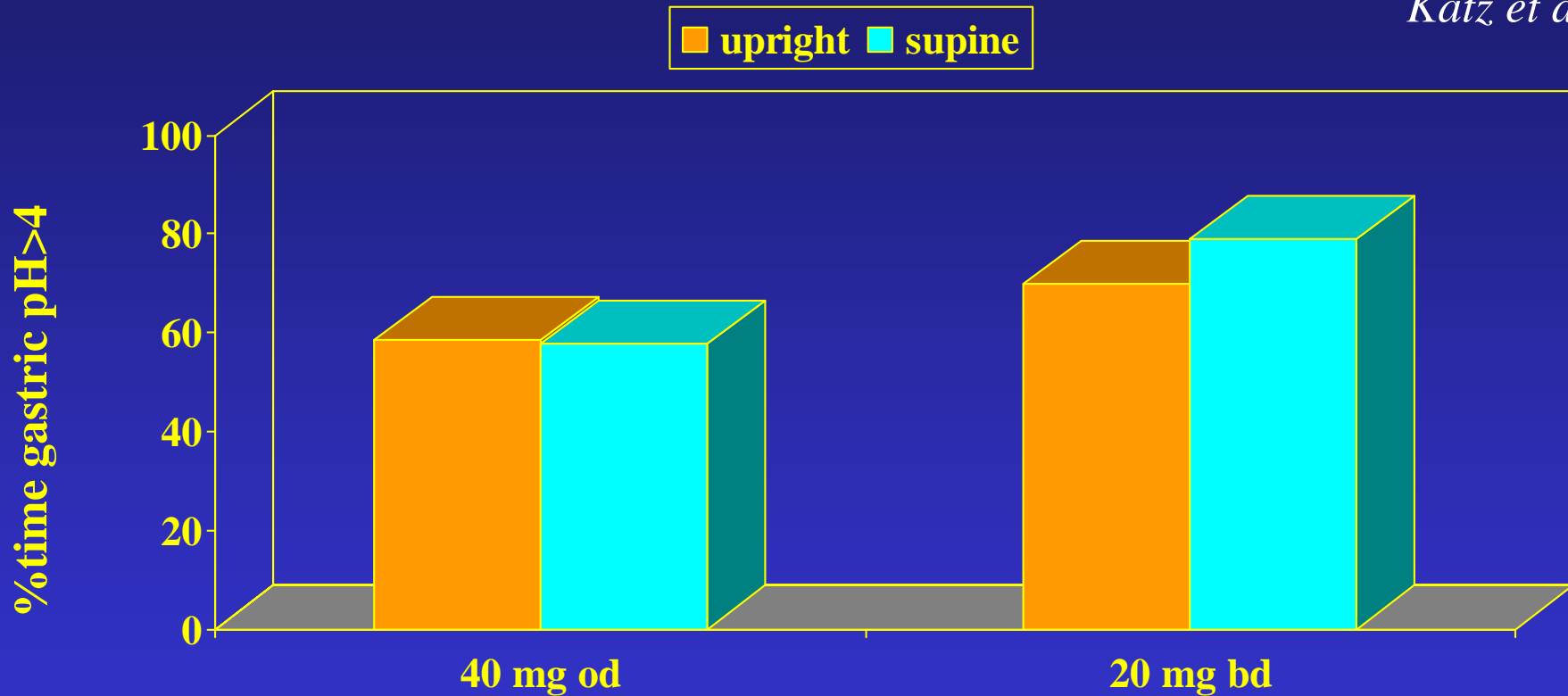
*PPI resistance*

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**Life style changes!**

# SPLITTING ESOMEPRAZOLE DOSE IMPROVES NOCTURNAL ACID SUPPRESSION

*Katz et al, 2004*



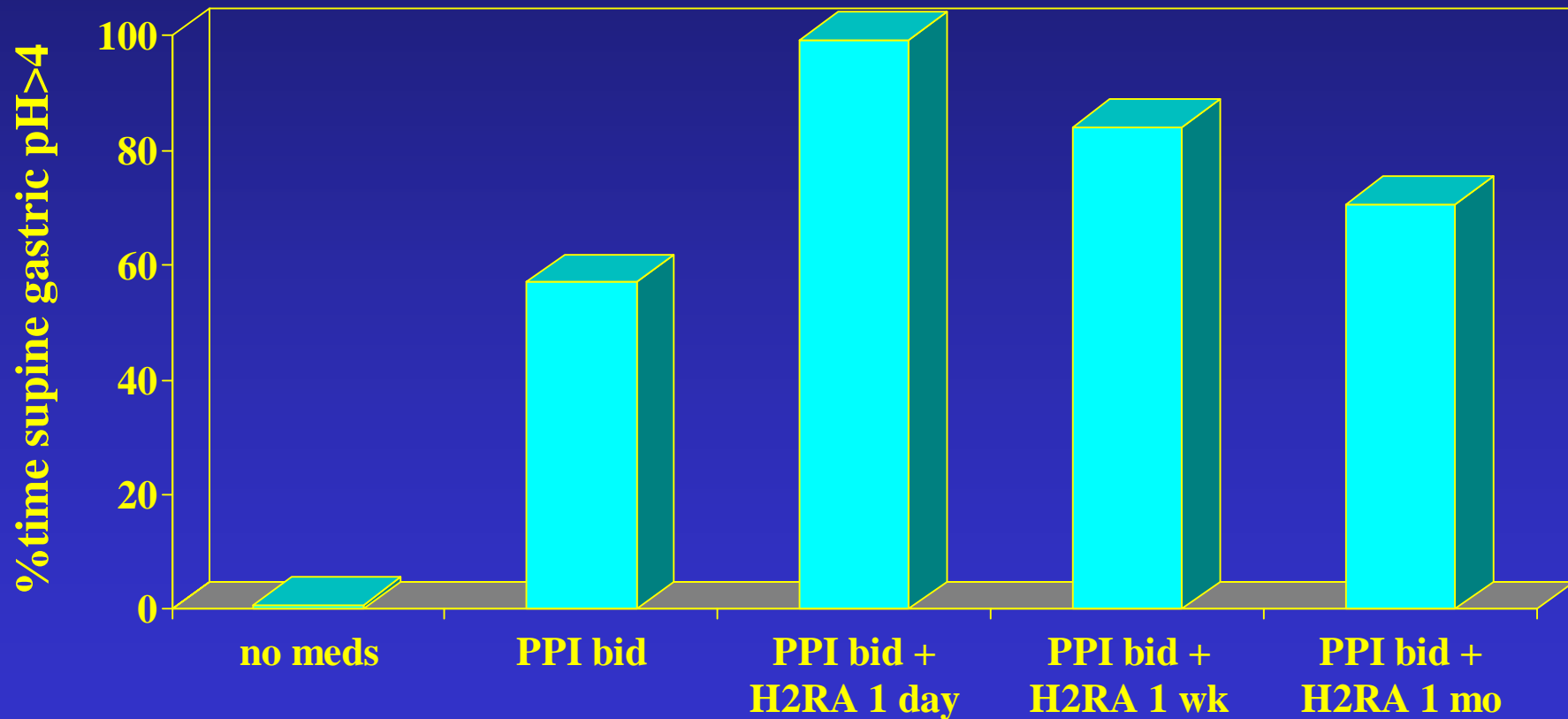
**Better control of nocturnal reflux with evening vs morning rabeprazole  
20 mg in pts with nocturnal symptoms**

*Pehlivanov et al, 2003*

# RANITIDINE 300 mg AT BEDTIME ON NOCTURNAL INTRAGASTRIC ACIDITY IN GORD PTS

\*  $p < 0.001$  vs all other regimens

*Fackler et al, 2002*



Occasional use of H<sub>2</sub> RA at bedtime!

# **NIGHT-TIME SYMPTOMS**

## **other options**

- **Fundoplication**
- **Anti TLOSR therapy (evening baclofen 10 mg)**

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# **REGURGITATION AS THE DOMINANT SYMPTOM**



**Fundoplication**

**? Future: endoscopic therapy (+PPI)**

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**Is pH + impedance monitoring useful to identify pts sensitive to weakly acidic reflux who will benefit from fundoplication?**



# PAIN MODULATORS

- **Controlled trials in NCCP patients:**

**Trazodone** (*Clouse et al, 1987*)      **100-150 mg/die**

**Imipramina** (*Cannon et al, 1994*)      **50 mg a sera**  
(inizio con 10 mg)

**Sertralina** (*Varia et al, 2000*)      **50-200 mg/die**

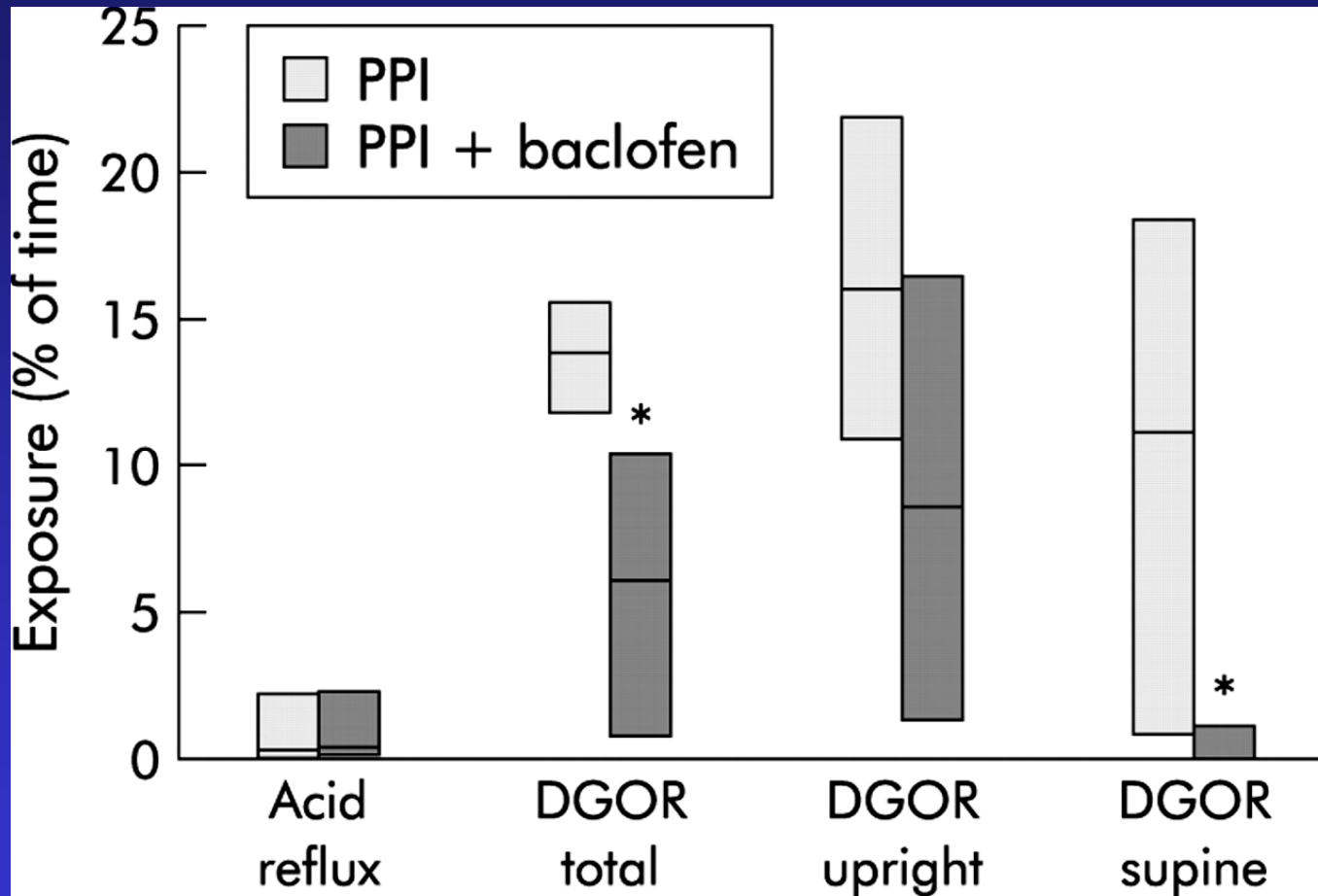
(promising data with citalopram *Broekaert et al, 2006*)

Response to imipramine in 2-3 weeks

SSRIs if important mood disorder; >1 month to achieve a response

# ANTI-TLORSR THERAPY

*Koek et al., 2003*



Heartburn severity score (1-3) from 1.6 (PPI) to 0.8 (PPI+baclofen),  $p < 0.05$

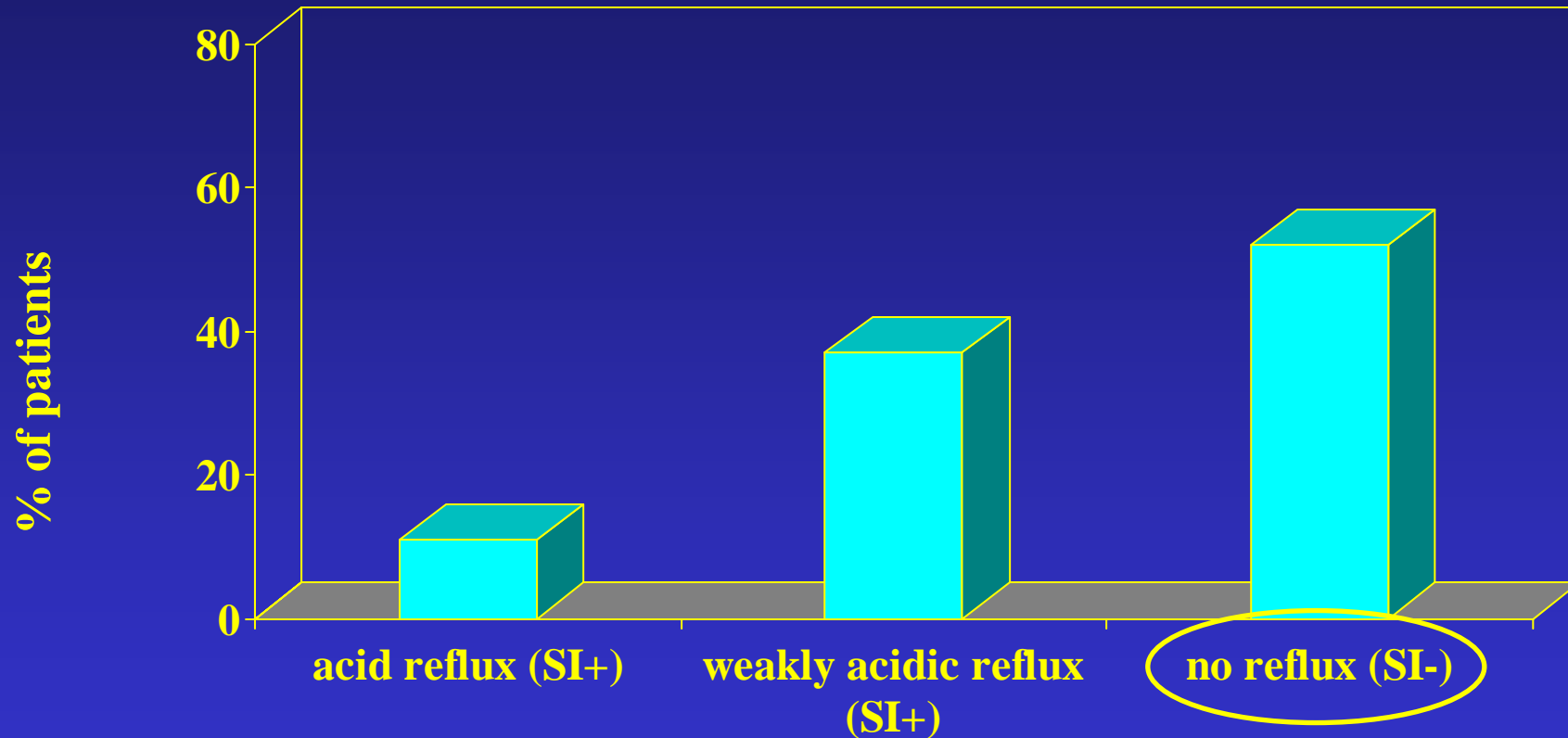
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# 24h pH+IMPEDANCE IN 144 PTS REFRACTORY TO PPIs BD

Mainie et al, 2006



Symptomatic weakly ac. reflux in 17% and **no reflux in 63%** of 60 refractory pts on PPIs *by SAP analysis*

Zerbib et al, 2006

# HOW TO APPROACH PATIENTS “REFRACTORY TO PPIs” IN CLINICAL PRACTICE?

Review the patient's history (*generally endoscopy done*)

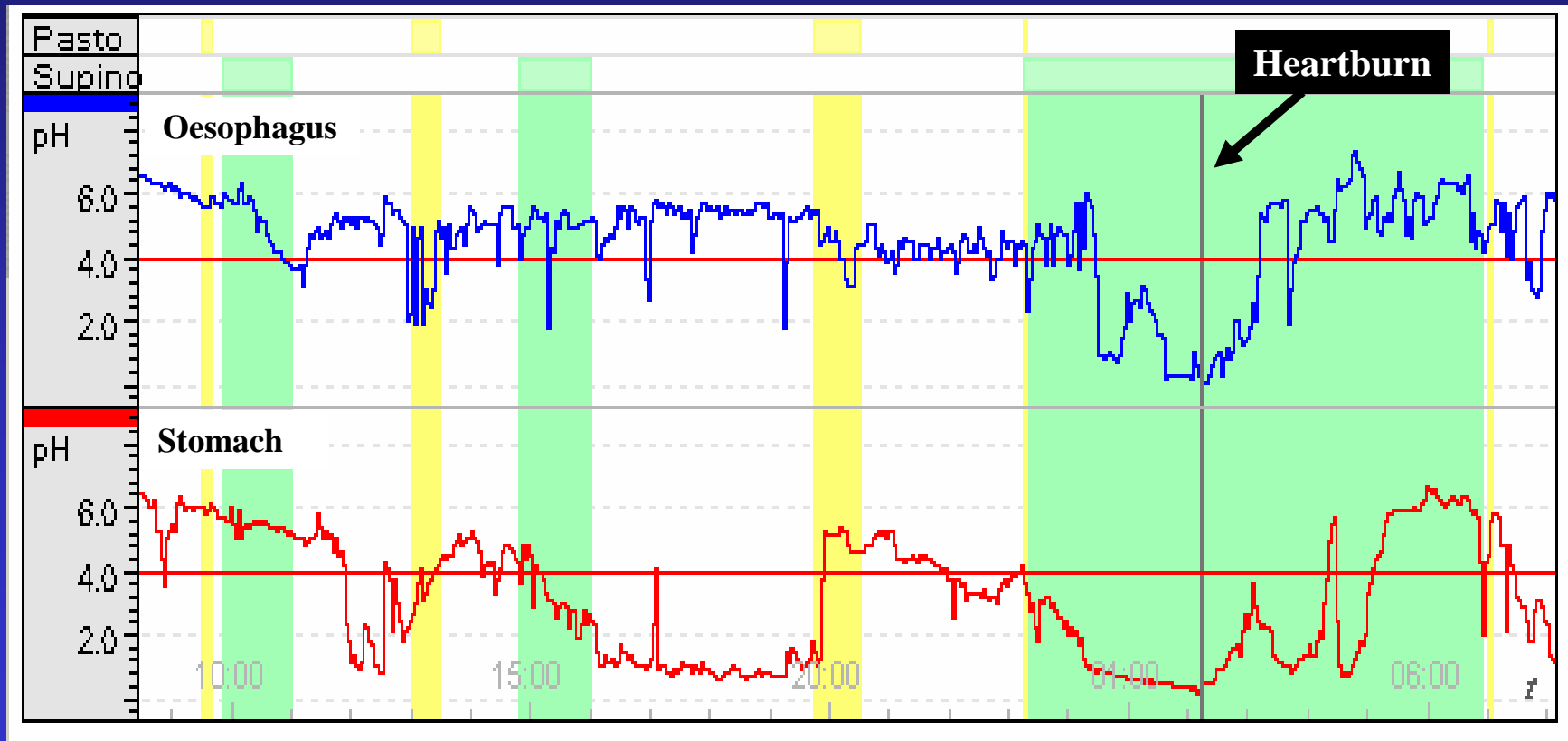
**a) if GER is likely to be the cause of symptoms:**

- 1) check compliance and /or modify PPI administration
- 2) if the pt is still unsatisfied: oesophageal and gastric pH monitoring (or oesophageal pH + impedance) generally on double dose PPIs with symptom-reflux association analysis

**15-20% of patients will not have symptoms during the 24h test!!**

*Mainie et al, 2006; Zerbib et al, 2006*

# OESOPHAGEAL AND GASTRIC pH MONITORING ON PPIs (patient with unsatisfactory control of symptoms)

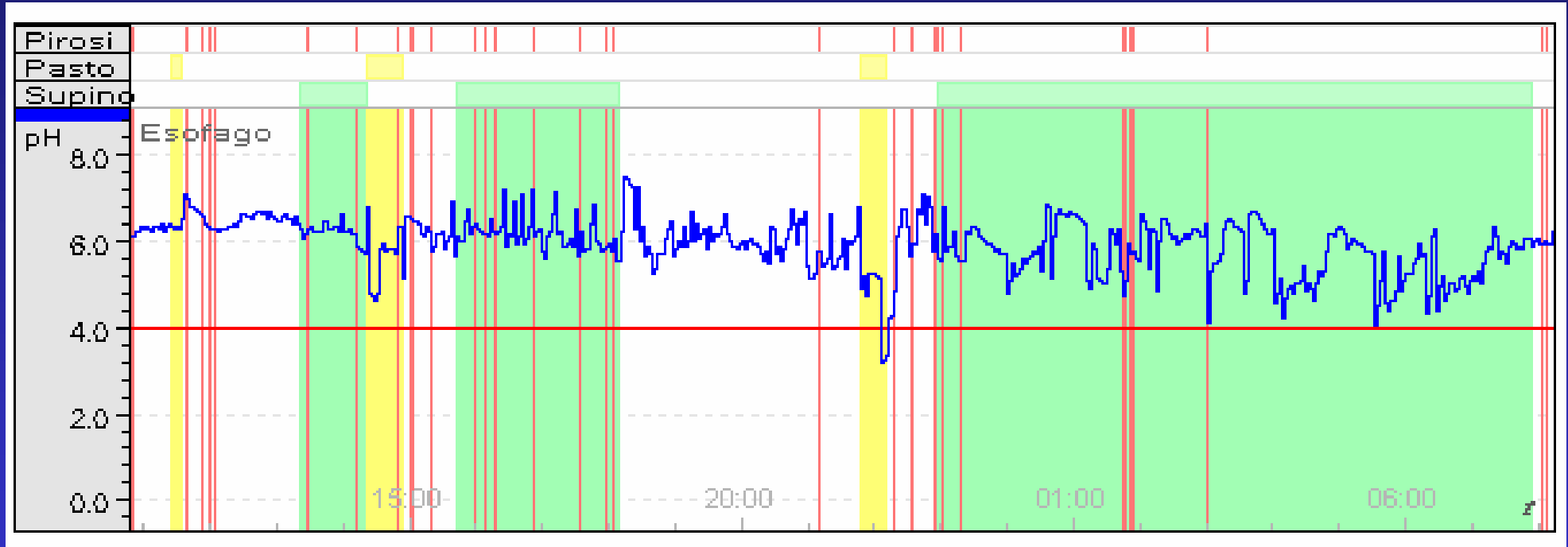


# HOW TO APPROACH PATIENTS “REFRACTORY TO PPIs” IN CLINICAL PRACTICE?

- b) If it is uncertain that GER is the cause of symptoms (and dose/duration of PPI treatment has been adequate)**
- c) If we want to refer a patient with regurgitation to the surgeon:**

**oesophageal pH (+ impedance ?) monitoring off PPIs in order to exclude/confirm GERD; 48-96h wireless pH monitoring if symptom is infrequent**

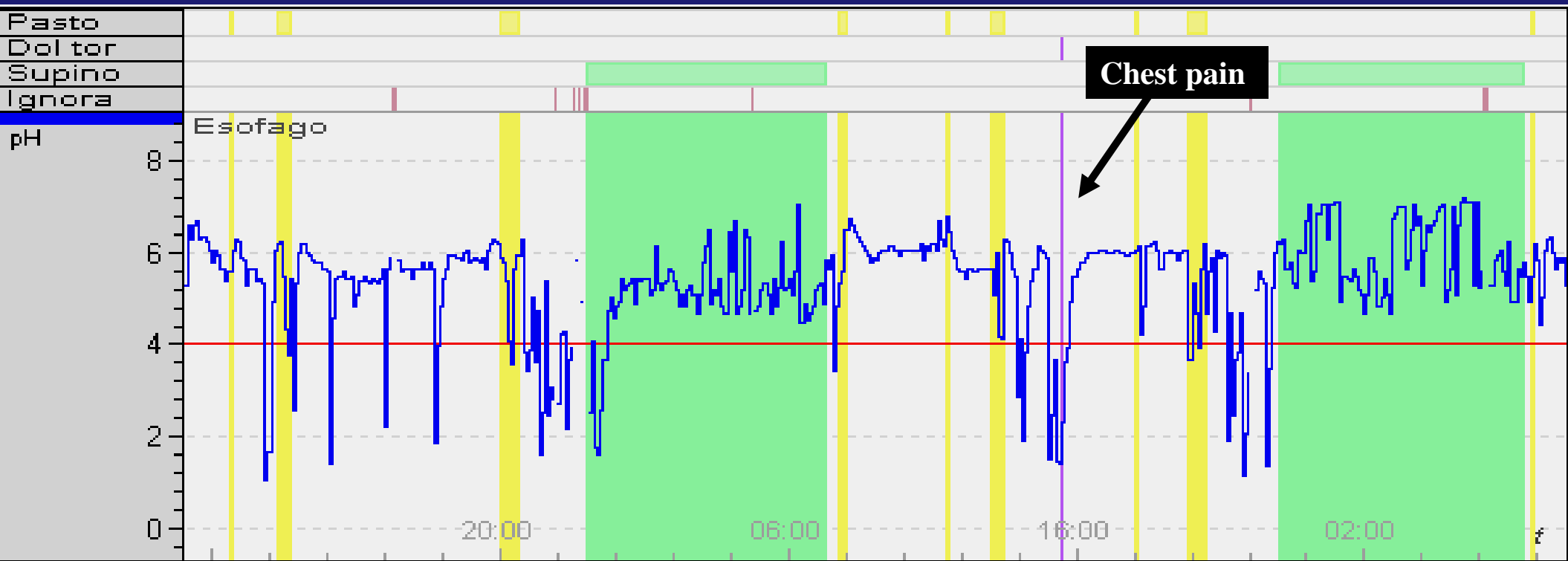
# OESOPHAGEAL pH MONITORING OFF PPIs (young patient with atypical heartburn not responsive to PPIs)



**Normal oesophageal acid exposure**

**Heartburn (*red vertical lines*) not related to acid reflux**

# 48 h WIRELESS OESOPHAGEAL pH MONITORING OFF PPIs (pt with IHD on cardio treatment with residual chest pain)



pH<4(%)	total	upright	supine
Day 1	5.1	6.1	3.4
Day 2	3.7	5.7	0.0



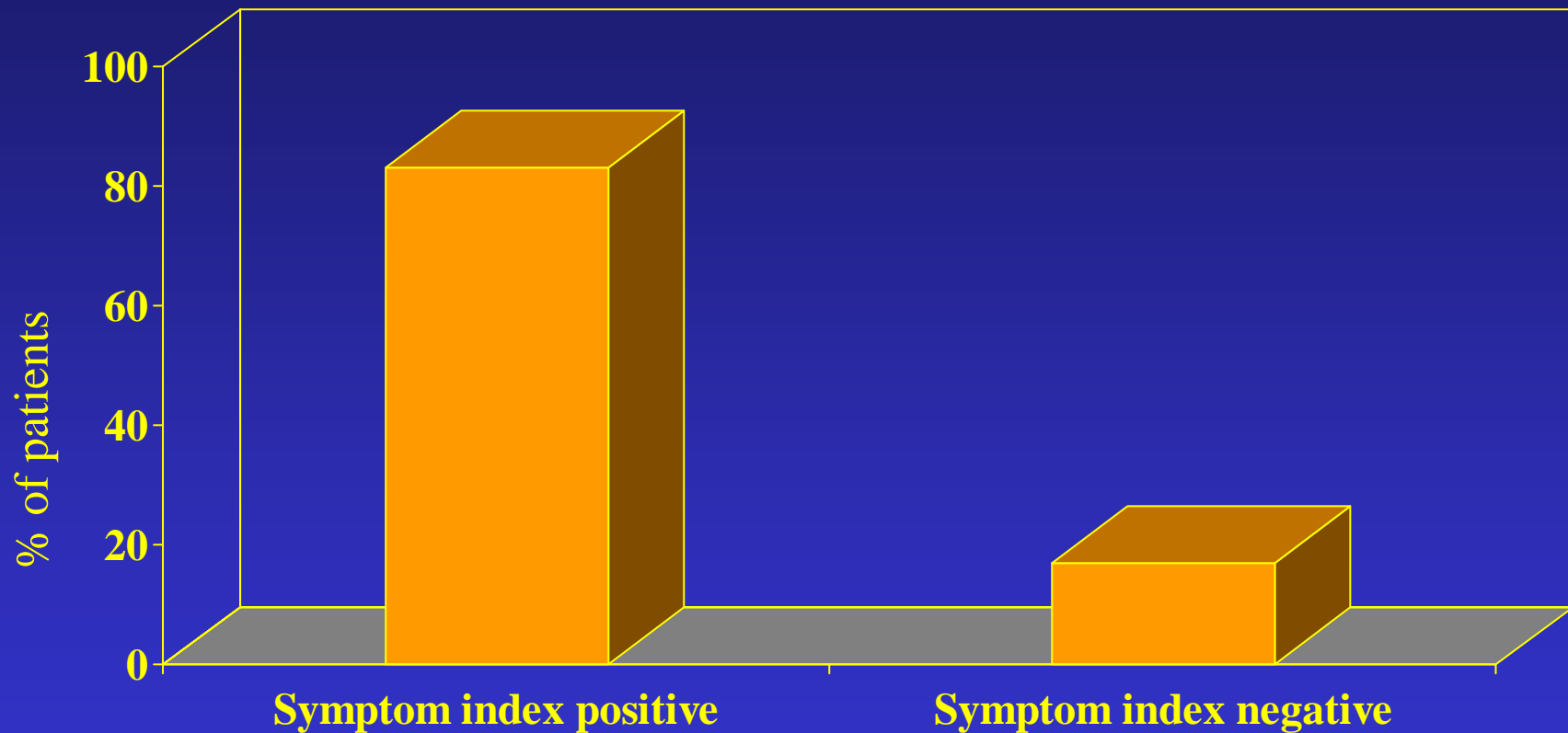
SIRO PENAGINI 1885-1952

# **HYPERSENSITIVE PATIENTS**

**Endoscopy negative patients with heartburn  
and/or chest pain + normal oesophageal acid  
exposure and positive Symptom Index**

# SYMPTOM IMPROVEMENT WITH OME 20X2 VS PLACEBO

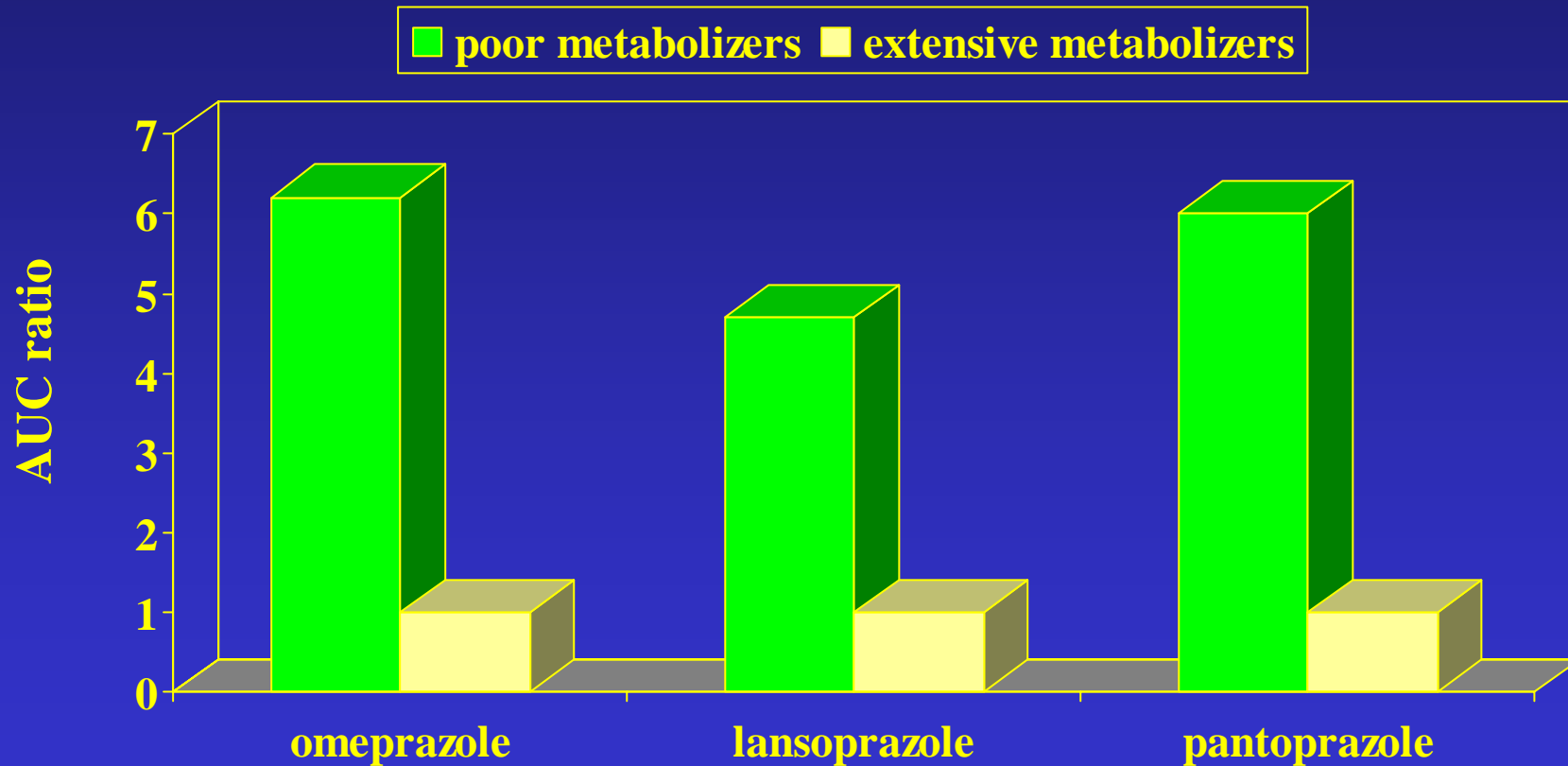
*Watson et al., 1997*



High dose PPIs are effective in pts. with good correlation between symptoms and acid reflux (positive Symptom Index)

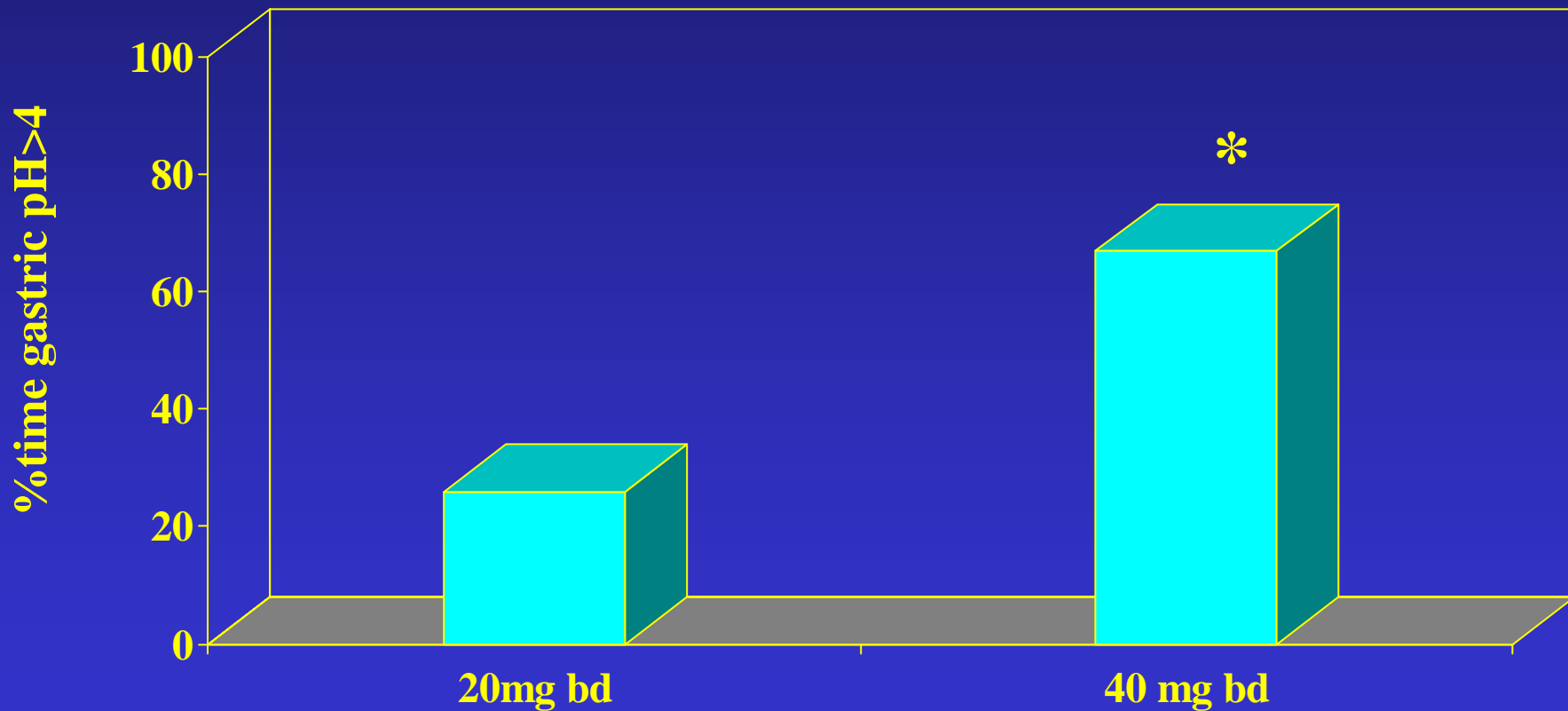
# RATIO OF AUC BETWEEN POOR AND EXTENSIVE METABOLIZERS

*McColl et al, 2002*



# INTRAGASTRIC pH>4 DURING OME 40 BD IN PTS WITH FAILURE OF OME 20 BD

\* p<0.01



*Leite et al, 1996*