

# Dyspepsia

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PROF ARJUNA DE SILVA

# Case

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35 year old man who was apparently well up to six months ago, presented with epigastric pain and bloating of 3 months duration. No loss of weight or loss of appetite. No family history of cancer.

How would you manage this patient ?

# Introduction

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Dyspepsia was described by Cicero as well

Prevalence 20 % of global population

Commoner among, Smokers, females & NSAID users

No reduction in life expectancy

Major impact on quality of life

*Bailey AG et al. Initial poor quality of life and new onset of dyspepsia: results from a longitudinal 10-year follow-up study. Gut 2007;56:321–7.*

# Definition

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Many definitions

**Epigastric** pain of more than one months duration. This can be associated with any other upper gastrointestinal symptom such as epigastric fullness, nausea, vomiting, or heartburn

*Paul M. Moayyedi et al ACG and CAG Clinical Guideline: Management of Dyspepsia 2017*

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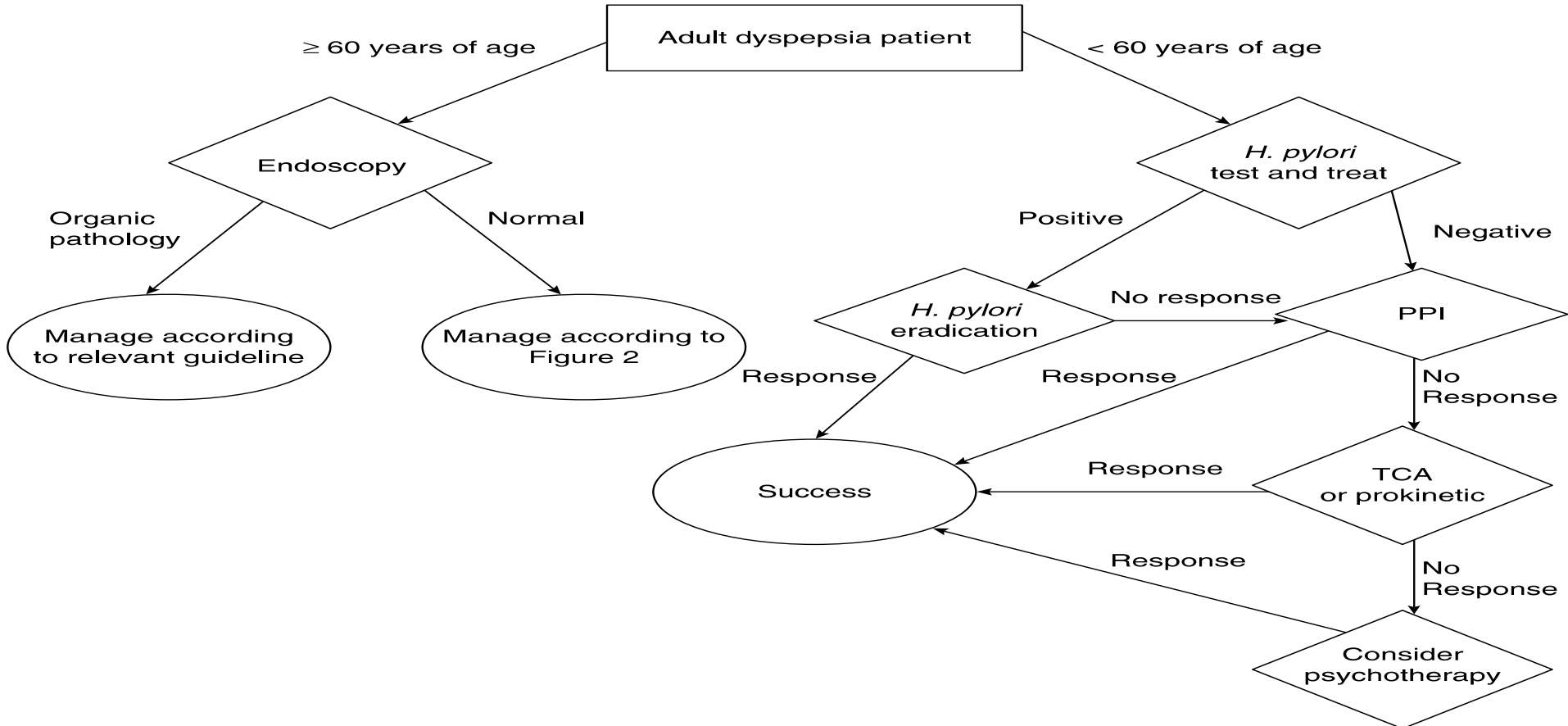
# History and Examination

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Alarm symptoms, Asprin, NSAID use smoking alcohol.

Pallor, lymphadenopathy epigastric mass

# Management



# Alarm symptoms

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Non intentional weight loss(>6 % over one year)

Dysphagia

Odynophagia

Unexplained iron deficiency anaemia

Persistent vomiting

Palpable mass or lymphadenopathy

Family history of upper gastrointestinal cancer

*Talley NJ et al. AGA technical review on evaluation of dysphagia. Gastroenterology 2005*

# Non invasive detection of H.pylori

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Breath testing

Stools for antigen

Not serologic testing

If positive eradication therapy **2 weeks**

*Vinothini A et al. Cost-effectiveness of and satisfaction with a Helicobacter pylori “test and treat” strategy compared with prompt endoscopy in young Asians with dyspepsia. Gut 2008;57:1214–20.*



# PPI

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Single dose (40 mg esomeprazole, 30 mg Dexlansoprazole, Pantoprazole 40mg , Omeprazole40 )

No evidence for using double dose

4 weeks to 8 weeks

**USE for minimal duration.**

Try to wean off every 6 months

H2RA can be used as well.

*de Nucci C et al. Empirical prescribing for dyspepsia: randomised controlled trial of test and treat versus omeprazole treatment. BMJ 2003;326:1118.*

# Evidence for test and treat v PPI

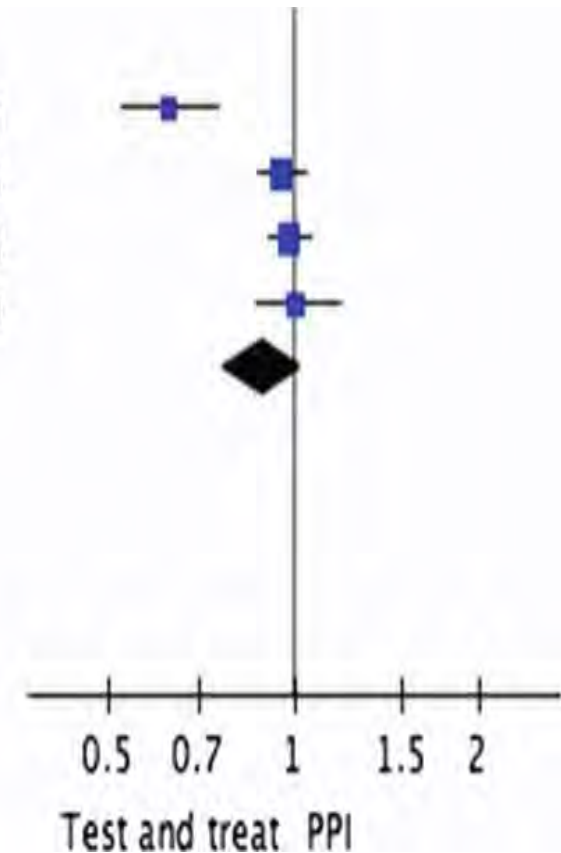
## 5.1.2 All patients randomised before testing

Manes 2003	61	110	96	109	21.4%	0.63 [0.53, 0.75]	2003
Jarbol 2006	195	250	181	222	27.4%	0.96 [0.87, 1.05]	2006
Delaney 2008	217	265	229	276	28.1%	0.99 [0.91, 1.07]	2008
Duggan 2009	124	198	110	178	23.1%	1.01 [0.87, 1.19]	2009
<b>Subtotal (95% CI)</b>		<b>823</b>		<b>785</b>	<b>100.0%</b>	<b>0.89 [0.77, 1.04]</b>	

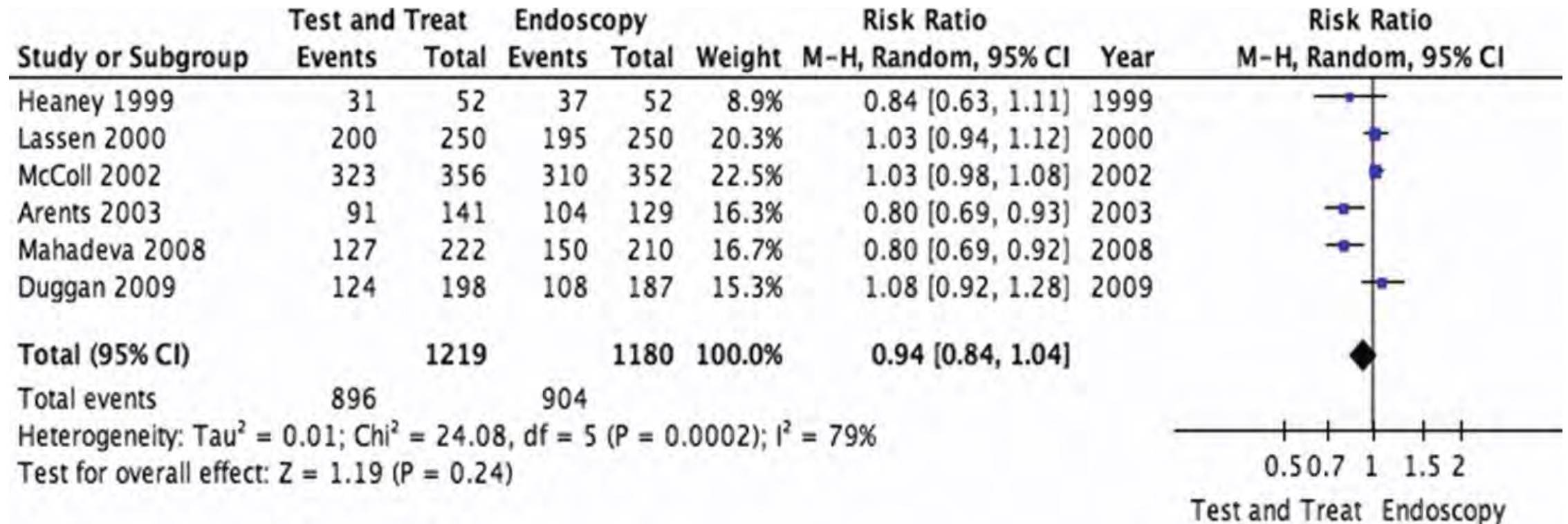
Total events                    597                    616

Heterogeneity:  $\tau^2 = 0.02$ ;  $\chi^2 = 21.65$ ,  $df = 3$  ( $P < 0.0001$ );  $I^2 = 86\%$

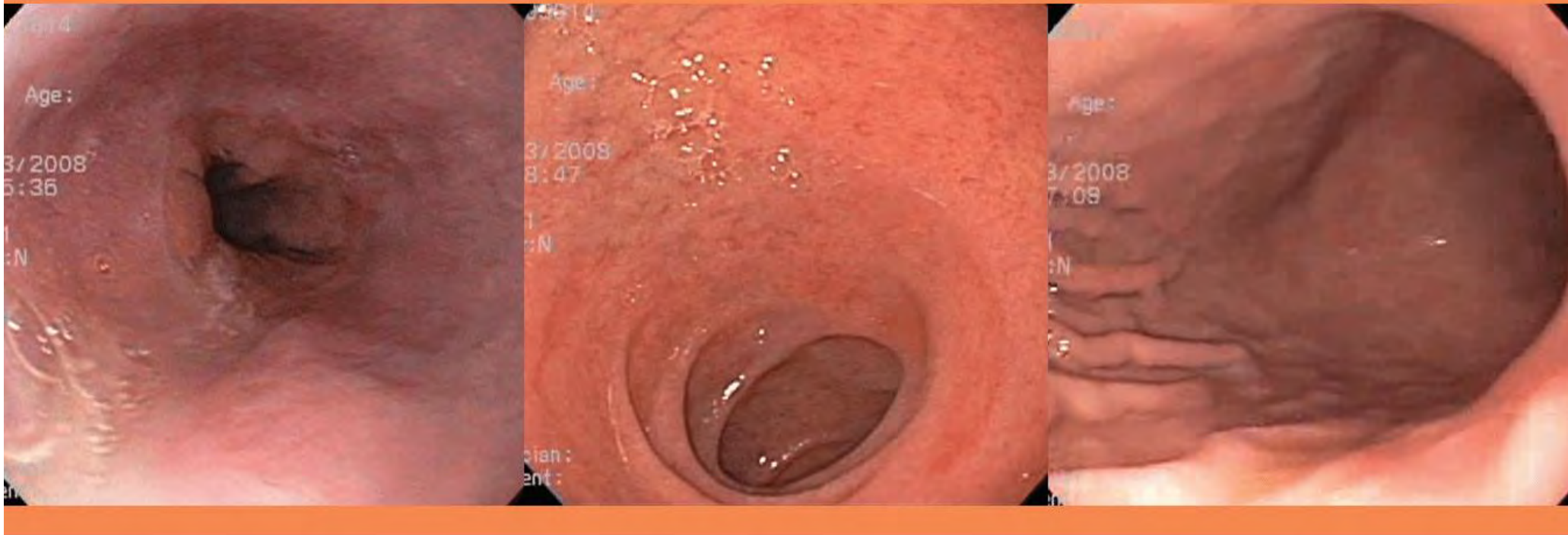
Test for overall effect:  $Z = 1.41$  ( $P = 0.16$ )



# Evidence for test and treat v endoscopy



# Endoscopy



*View of Esophagus*

*View of Duodenum*

*View of Stomach*

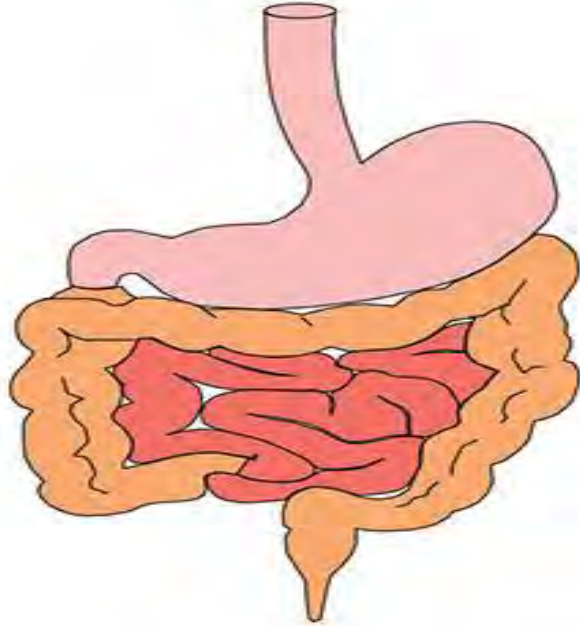
# Practical tips

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Even if endoscopy is normal biopsy GOJ (eosinophilis eosophagitis)

Use NBI or some enhancing system

Diagnostic criteria based on symptoms that are not explained by any detectable disease



- FGIDs in adults
- 6 principal domains
  - 27 disorders

- **A. Esophageal disorders**
  - A1. Functional chest pain
  - A2. Functional heartburn
  - A3. Reflux hypersensitivity
  - A4. Globus
  - A5. Functional dysphagia
- **B. Gastroduodenal disorders**
  - B1. Functional dyspepsia
    - B1a. Postprandial distress syndrome (PDS)
    - B1b. Epigastric pain syndrome (EPS)
  - B2. Belching disorders
    - B2a. Excessive supragastric belching
    - B2b. Excessive gastric belching
  - B3. Nausea and vomiting disorders
    - B3a. Chronic nausea and vomiting syndrome (CNVS)
    - B3b. Cyclic vomiting syndrome (CVS)
    - B3c. Cannabinoid hyperemesis syndrome
- **C. Bowel disorders**
  - C1. Irritable bowel syndrome
  - C2. Functional constipation
  - C3. Functional diarrhea
  - C4. Functional abdominal bloating/distension
  - C5. Unspecified functional bowel disorder
  - C6. Opioid induced constipation
- **D. Centrally mediated disorders of gastrointestinal pain**
- **E. Gallbladder and sphincter of oddi (SO) disorders**
  - E1. Biliary pain
    - E1a. Functional gallbladder disorder
    - E1b. Functional biliary SO disorder
  - E2. Functional pancreatic SO disorder
- **F. Anorectal disorders**
  - F1. Fecal incontinence
  - F2. Functional anorectal pain
    - F2a. Levator ani syndrome
    - F2b. Unspecified functional anorectal pain
    - F2c. Proctalgia fugax
  - F3. Functional defecation disorders
    - F3a. Inadequate defecatory propulsion
    - F3b. Dyssynergic defecation

# Functional dyspepsia B1

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Rome iv

Diagnostic criteria

1. One or more of

:Bothersome postprandial fullness

Bothersome early satiation

Bothersome epigastric pain

Bothersome epigastric burning

AND

No evidence of structural disease (including at upper endoscopy) that is likely to explain the symptoms

Must fulfill criteria for B1a. Postprandial distress syndrome(PDS )and/or B1b. Epigastric pain syndrome(EPS).

Criteria fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis.

# Pathophysiology

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Delayed gastric emptying,

Impaired accommodation of the proximal stomach,

Abnormal gastric acid secretion,

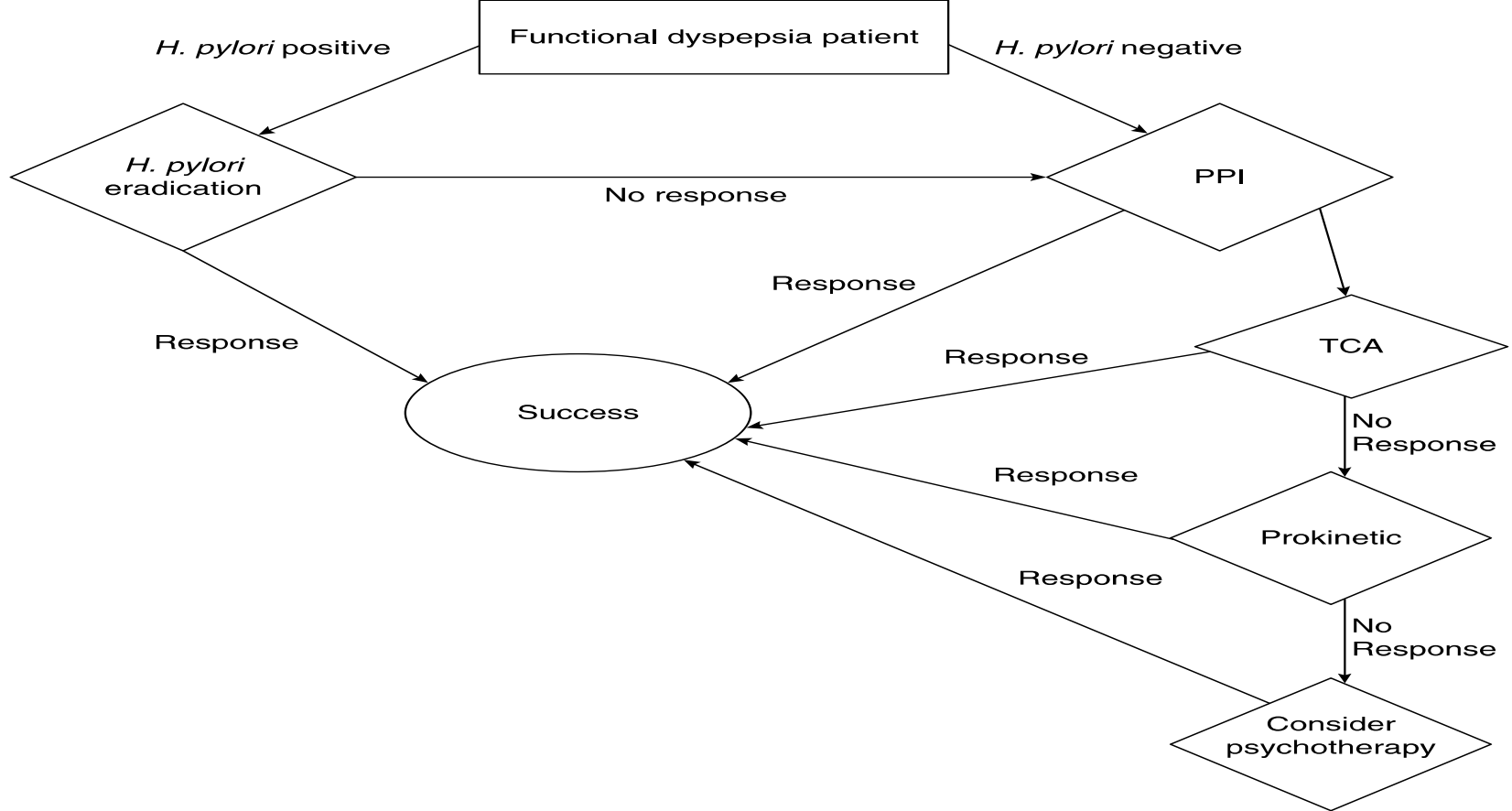
Visceral hypersensitivity

Dysbiosis

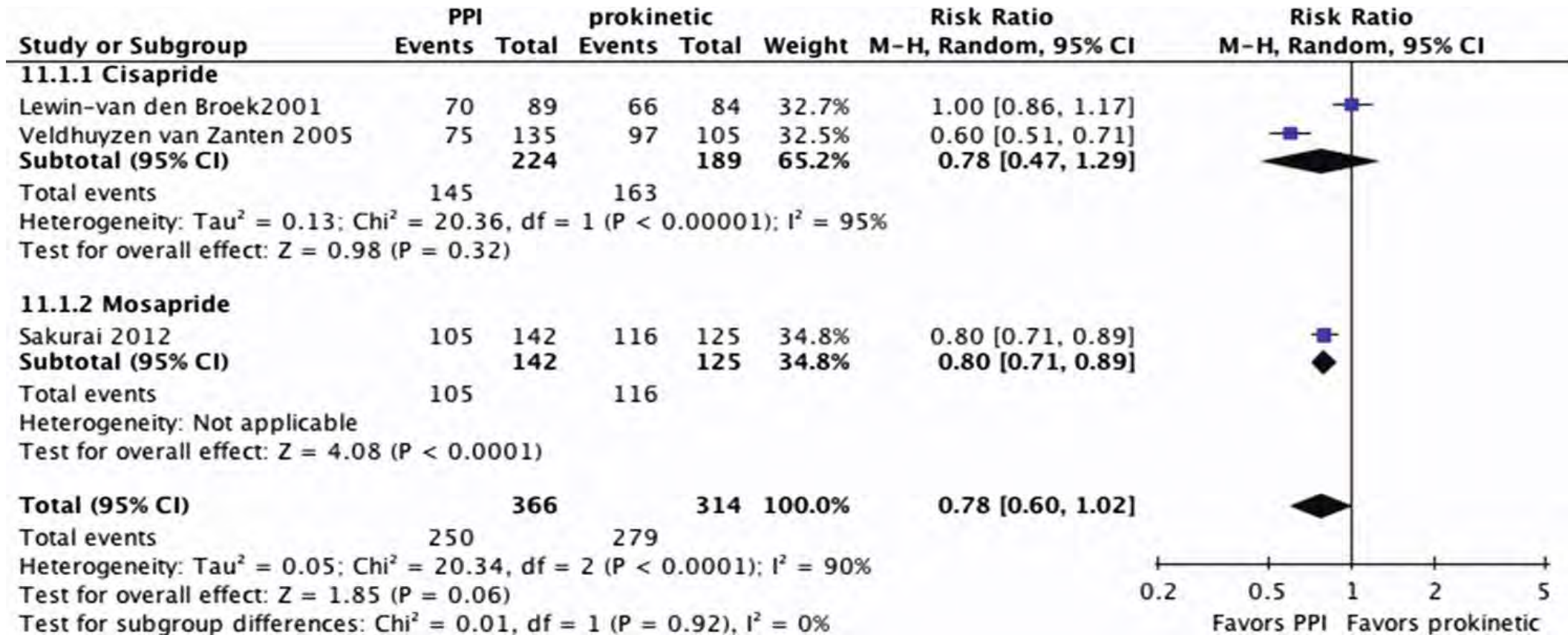
Psychological factors.



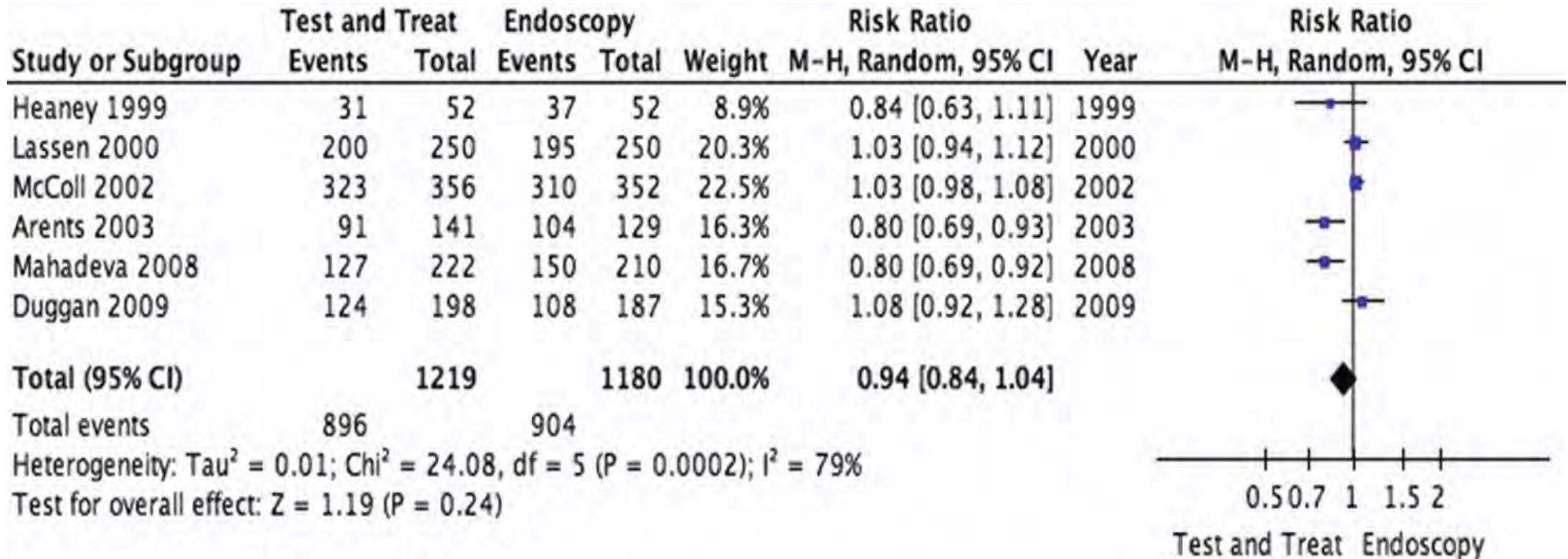
# Management



# Empirical PPI therapy with prokinetic therapy with continued dyspepsia as the outcome.



*H. pylori* test and treat with early endoscopy with continued dyspepsia as the outcome.



# Diet and lifestyle modification

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Wheat and dietary fats may play key roles in the generation of FD symptoms and reduction or withdrawal eased symptoms.

Randomised trials investigating the roles of gluten, FODMAPs (fermentable oligosaccharide, disaccharide, monosaccharide and polyols) needed.

Generally patients know !

*Duncasan FR et al. Food and functional dyspepsia: a systematic review. J Hum Nutr Diet 2018 Jun;31(3):390-407.*

# Tricyclic anti depressants (TCA)

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Amitriptyline 10 – 25 mg at night

8-12 weeks trial

Continue 6 months

SSRI not effective

*Tack J et al. Efficacy of psychotic drugs in functional dyspepsia: systematic review and meta-analysis. Gut 2016;66:411–20.*

# Prokinetics

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Metoclopramide , Domperidone , Mosapride

Side effects a problem

*Locke GR et al. Review article: current treatment options and management of functional dyspepsia. Aliment Pharmacol Therap 2012;36:3–1*

# Psychological therapy

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Can be used when medical treatment fails

Evidence based

Cognitive behavioral therapy (CBT)

*Orive VM et al. A randomized controlled trial of a 10 week group psychotherapeutic treatment added to standard medical treatment in patients with functional dyspepsia. J Psychosom Res 2015;78:563–8.*

# Rifaximine

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Rifaximine 400mg tid 2 weeks was better than placebo

Alters gut dysbiosis

YPY Tan et al. Randomised clinical trial: rifaximin versus placebo for the treatment of functional dyspepsia. *Aliment Therapu* 2017 . 667 - 676



# Complementary and Alternative medicine

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Not supported by strong evidence

STW 5 – Herbal preparation a herbal preparation containing extracts of bitter candy tuft, matricaria flower, pepper- mint leaves, caraway, licorice root, and lemon balm some benefit?

*Vinson B et al. STW 5, a phytopharmakon for patients with functional dyspepsia: results of a multicenter, placebo- controlled double-blind study. Am J Gastroenterol 2007;102:1268–75.*

# Motility studies

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No place for routine test

Only in selective patients

If gastroparesis is strongly suspected

# Summary

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Dyspepsia is a very common symptom

Epigastric pain is an essential feature

Endoscopy is useful but not essential 60 yrs is cut off in western guidelines

Test and treat for H. pylori followed by PPI

TCA and prokinetics

Psychological treatment is medical therapy fails

# Our patient

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Test and treat

PPI

Tricyclic