

# 위염에 대한 오해와 진실

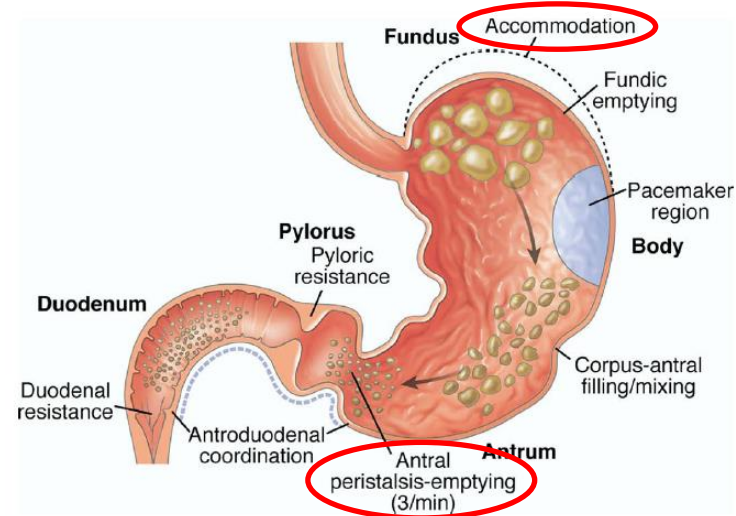
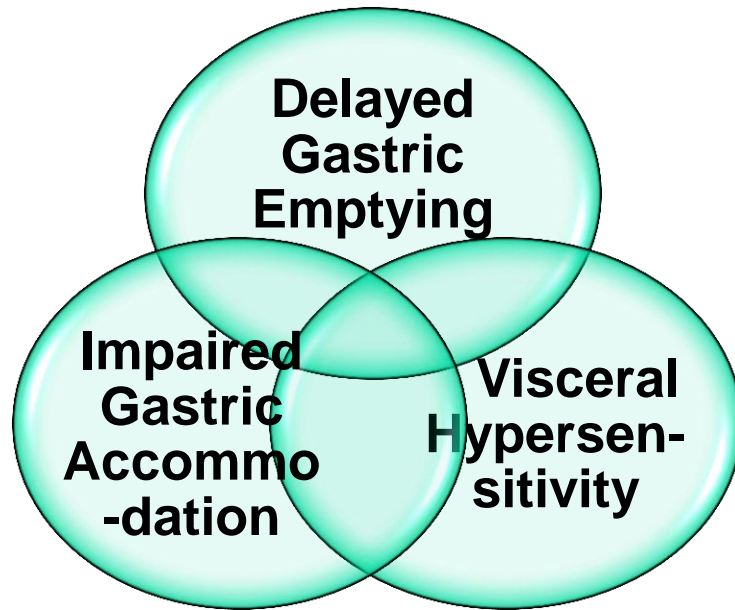
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민 병훈

# Chronic Dyspepsia in Gastritis Patients

## - Pathophysiology of functional dyspepsia

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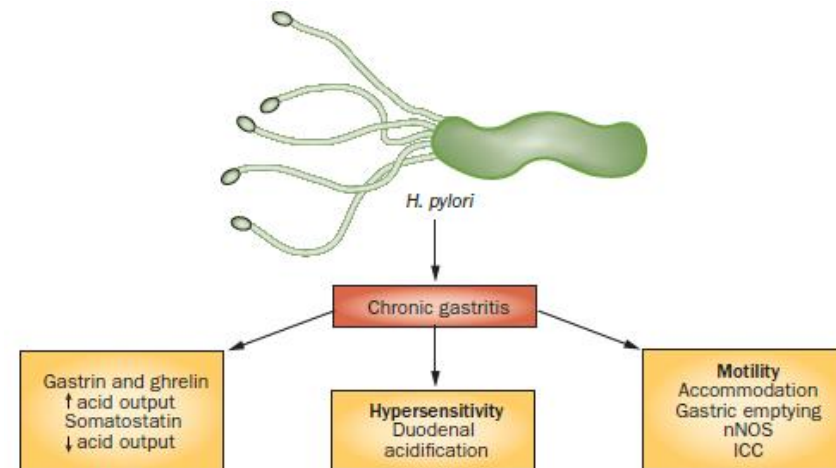
- Delayed gastric emptying: 40%
- Impaired gastric accommodation: 40%
- Hypersensitivity to gastric distension: 30%
- Hypersensitivity to acid

# *H. pylori*-associated Dyspepsia

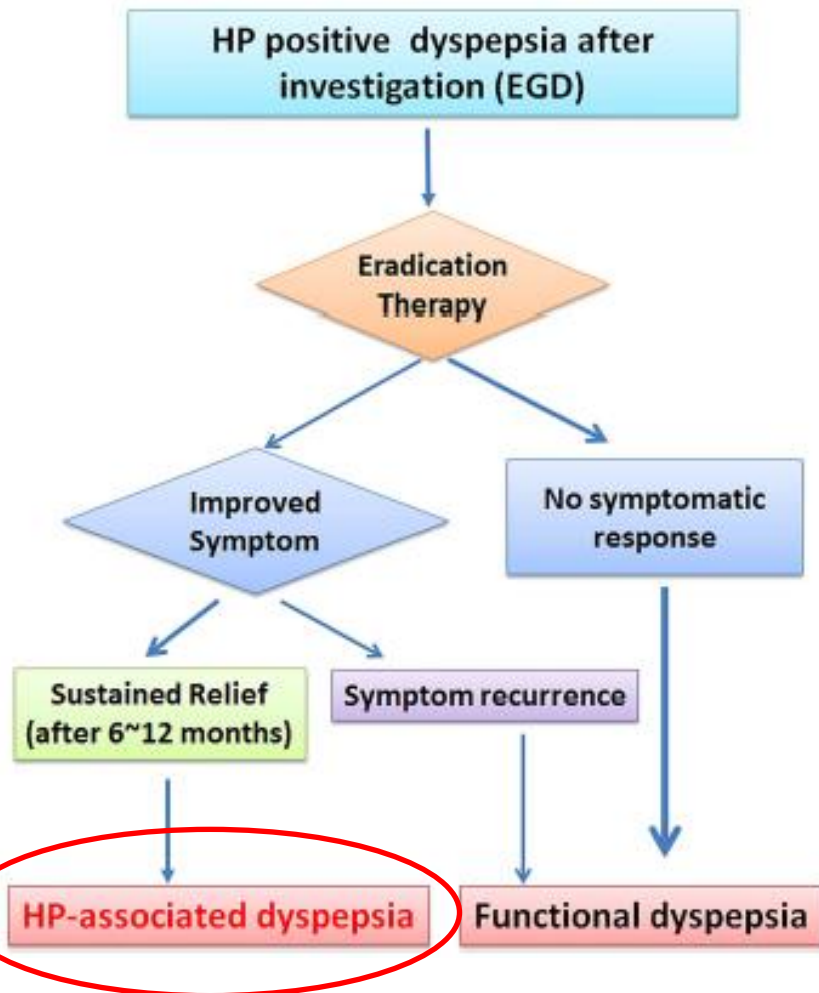
- **Weak** association with dyspeptic symptoms

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- *H. pylori* gastritis is the cause of dyspepsia in a subset of patients
- Self-administered infection with *H. pylori* can induce acute dyspeptic symptoms
- *H. pylori* eradication for chronic dyspepsia
  - Relative risk reduction over placebo: 10% (36% vs 29%)
  - Number needed to treat: 14
  - $1/14 = 7.1\%$

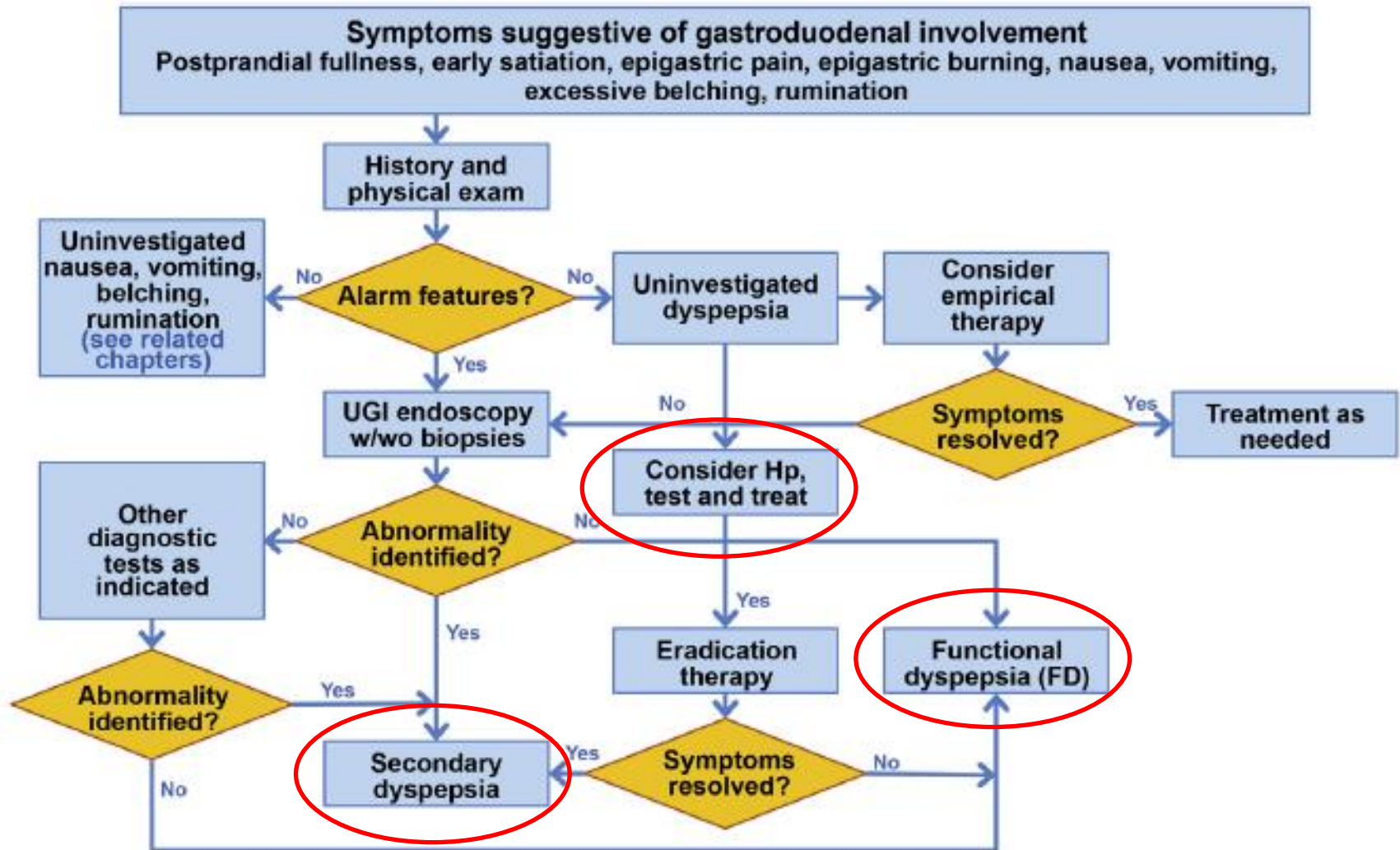


# *H. pylori*-associated Dyspepsia



- Symptoms can be attributed to *H. pylori* gastritis, if successful eradication therapy is followed by sustained symptom remission
- At least 6 months after *H. pylori* eradication for symptomatic gain
  - Time for gastritis to recover

# Management of Patients with Dyspepsia



# Functional Dyspepsia

## - Definition in ROME IV criteria

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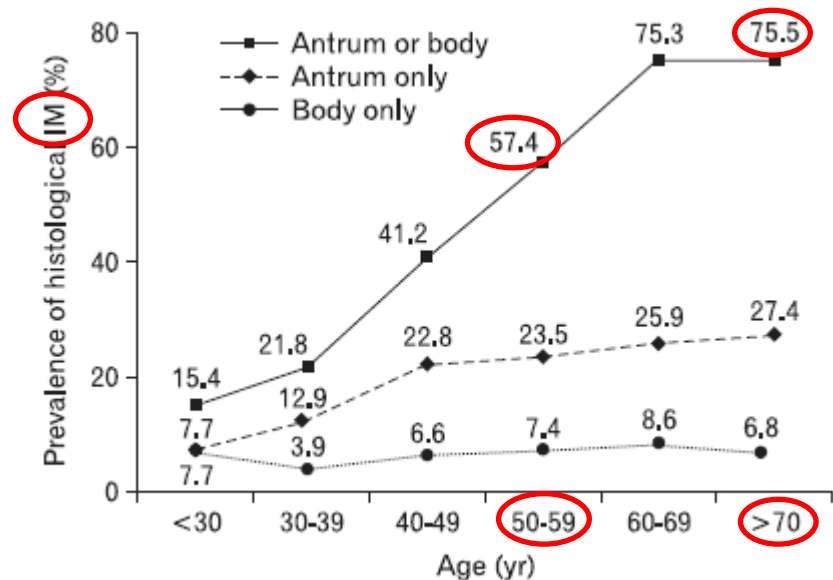
- **Secondary dyspepsia**
  - Organic, systemic, or metabolic cause of dyspepsia
  
- ***H. pylori*-associated dyspepsia**
  - A subset of **secondary** dyspepsia patients whose symptoms are treated by *H. pylori* eradication
  
- **Functional dyspepsia**
  - Those in whom no identifiable explanation for the symptoms can be identified by traditional diagnostic procedures



# Prevalence of CAG or IM in Korea

## - Histology-based

- 1330 subjects most of which had gastroduodenal diseases
- **Topographic biopsies** from both antrum & body
- Atrophy
  - Antrum: **57.2%**
  - Body: 38.3%
- Intestinal metaplasia
  - Antrum: **52.7%**
  - Body: 36.3%
  - Overall: **59.9%**

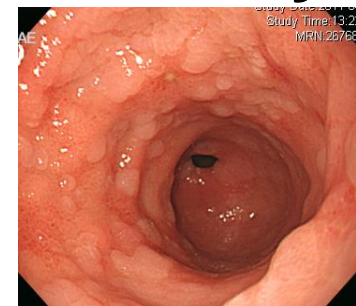
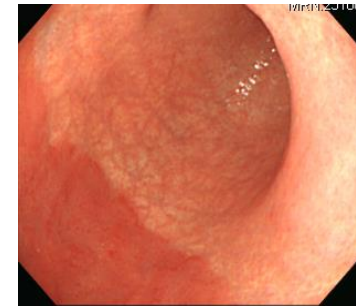


# Endoscopic Diagnosis of CAG or IM

- Limited accuracy

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- 1330 Korean patients
- Updated Sydney system as pathologic standard
- Endoscopic diagnosis of **atrophy** in antrum/body
  - Sensitivity: **61.5%/46.8%**
  - Specificity: **57.7%/76.4%**
- Endoscopic diagnosis of **IM** in antrum/body
  - Sensitivity: **24.0%/24.2%**
  - Specificity: **91.9%/88.0%**





# Chronic Atrophic Gastritis & IM

## - Established precancerous lesions

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- Very common ( $> 50\%$ ) in Korea, especially in elderly ( $>75\%$ )
- Accuracy of endoscopic diagnosis of CAG & IM
  - Very limited, especially for IM (sensitivity: 24%)
- Eradication of *H. pylori*
  - Potential for improving CAG but not IM
  - Potential for preventing GC in patients without IM or extensive CAG
- Recent expansion of insurance coverage
  - Appropriate target???

# Pepsinogen

- Marker for extensive atrophic gastritis

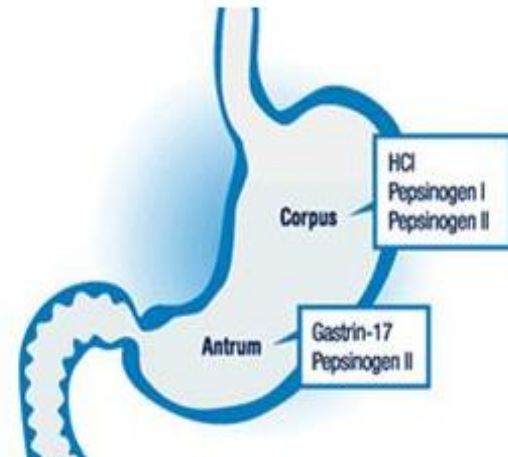
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## ■ Pepsinogen I

- Secreted by chief and mucous neck cells
- Corpus and fundus only
- Extensive atrophic gastritis including corpus → marked decrease

## ■ Pepsinogen II

- Secreted by chief and mucous neck cells
- **Pyloric glands**
- **Brunner's glands in duodenum**
- Extensive atrophic gastritis including corpus → mild decrease



# ABC Method

## - Serum pepsinogen & *H. pylori* Ab

- Mean 4.7 years of follow-up
- Annual incidence of GC
  - A: HP (-), PG (WNL) → 0.04%
  - B: HP (+), PG (WNL) → 0.06%
  - C: HP (+), PG (AG) → 0.35%
  - D: HP (-), PG (AG) → 0.60%

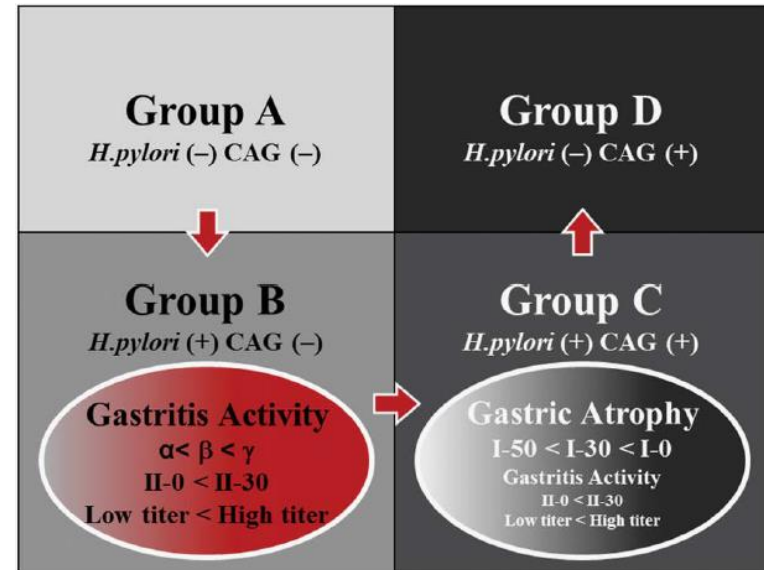


Table 3 Hazard ratio assessment adjusted by Cox proportional hazard model

	Hazard ratio	95% CI	p Value
Group			
A	1		
B	1.1	0.4-3.4	0.81
C	6.0	2.4-14.5	<0.0001
D	8.2	3.2-21.5	<0.0001
Age (y)			
<60	1		
>60	5.3	2.9-9.9	<0.0001
Sex			
Female	1		
Male	3.2	1.3-8.2	0.01

# *H. pylori* Eradication for Preventing GC

## - Meta-analysis

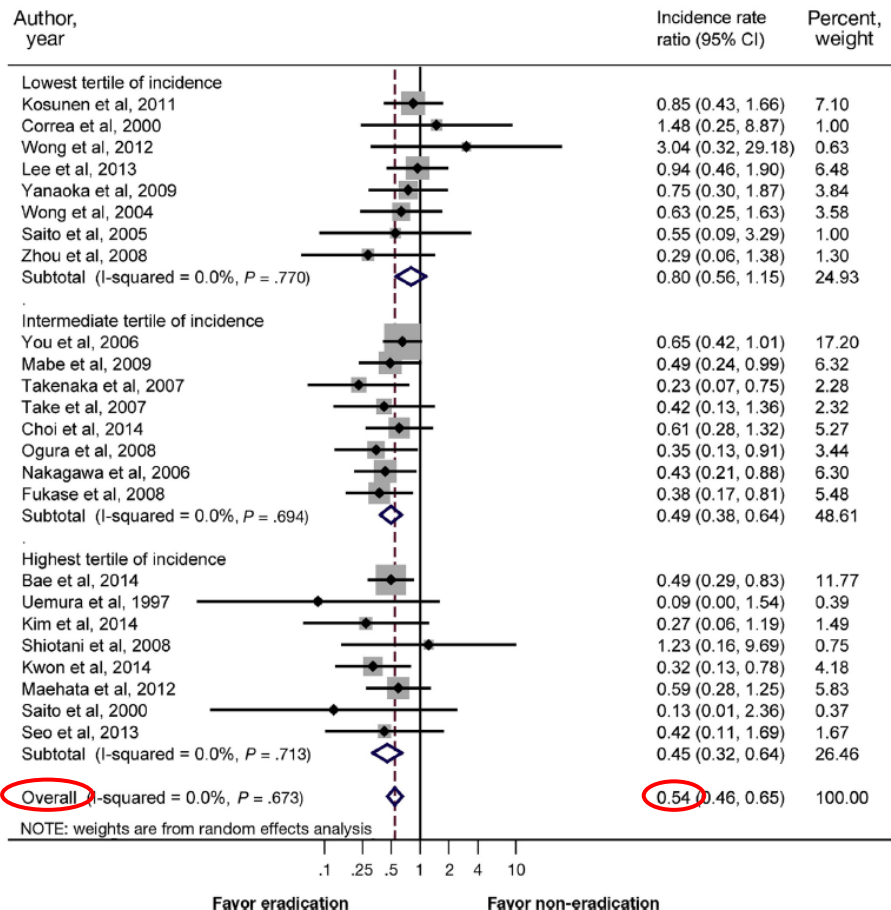


Figure 2. Summary incidence rate ratio of gastric cancer associated with *H. pylori* eradication by traditional random-effects meta-analysis, stratified by baseline incidence of gastric cancer.

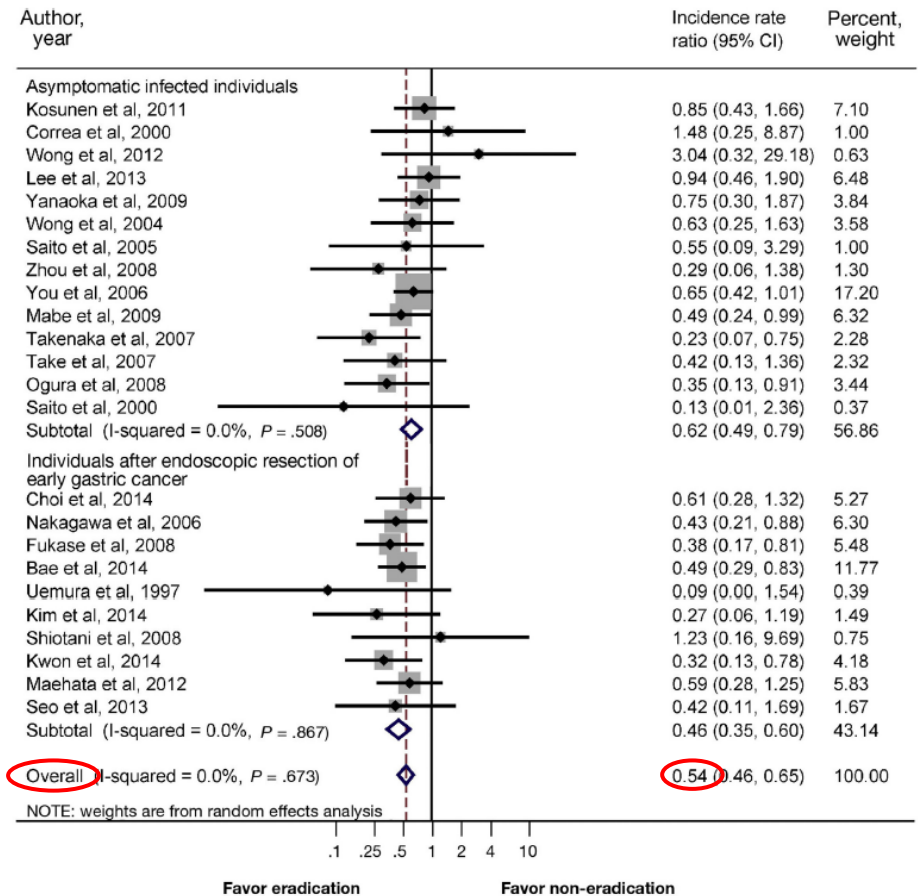


Figure 3. Summary incidence rate ratio of gastric cancer associated with *H. pylori* eradication by traditional random-effects meta-analysis, stratified by clinical scenario (asymptomatic infected individuals vs individuals after endoscopic resection of early gastric cancer).