

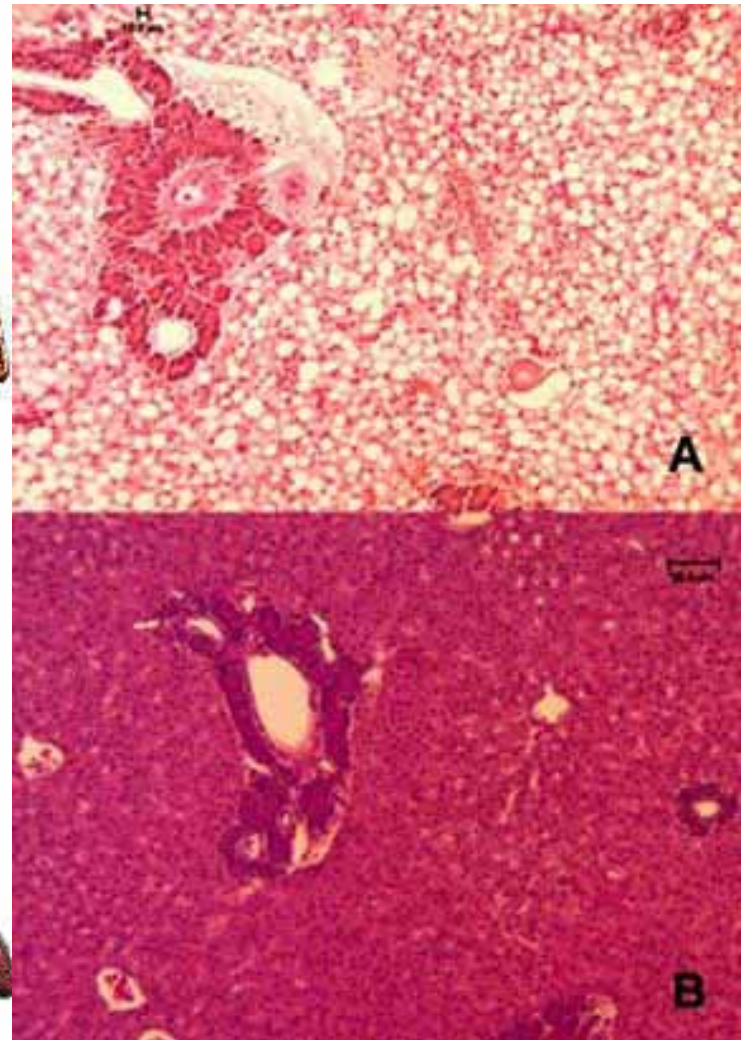
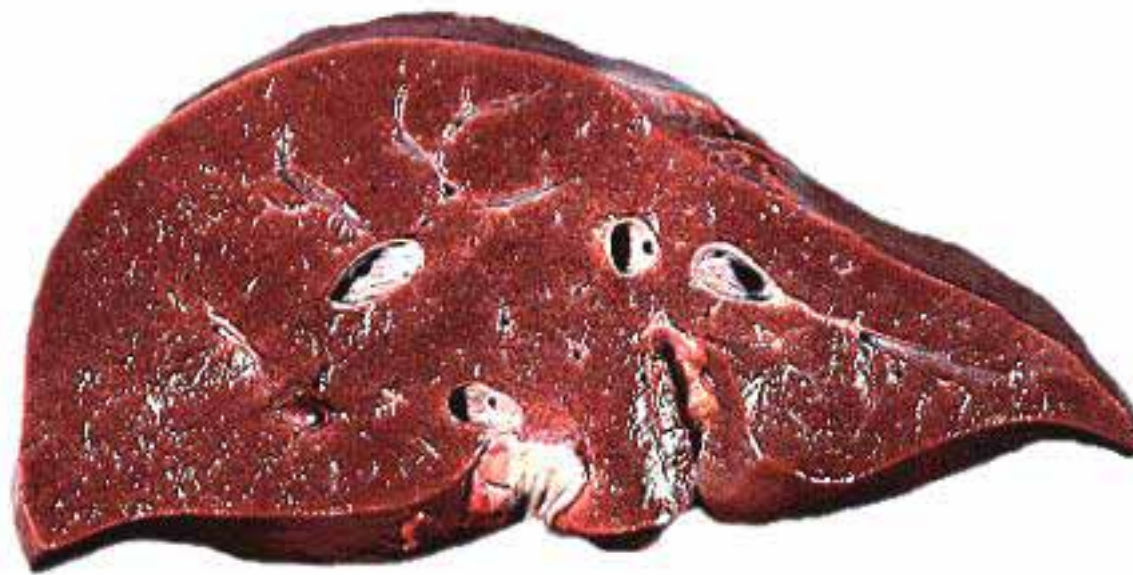


# 脂肪肝與腸胃病的致命處

姚志謙醫生  
腸胃及肝臟專科醫生



# 脂肪肝

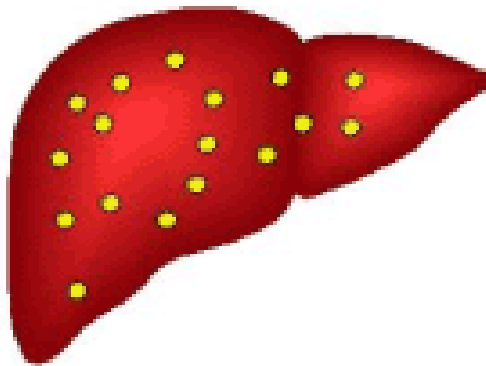




***Normal Liver, Fatty Liver, and Cirrhosis***

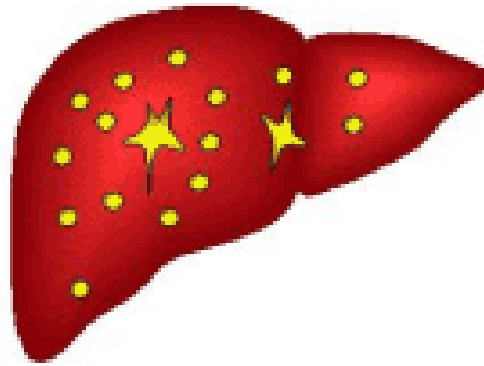
# The Spectrum of NAFLD

脂肪積聚(脂肪肝)  
Fatty Liver



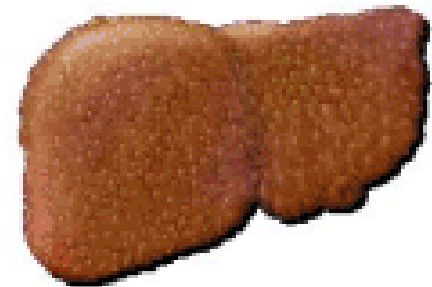
Fat  
accumulates  
in the liver

脂肪性肝炎  
NASH



Fat plus  
inflammation  
and scarring

肝硬化  
Cirrhosis



Scar tissue  
replaces liver  
cells

# 脂肪性肝病的臨床幅度

正常



第一擊

脂肪積聚  
(脂肪肝)



關鍵性的轉變 (第二擊)

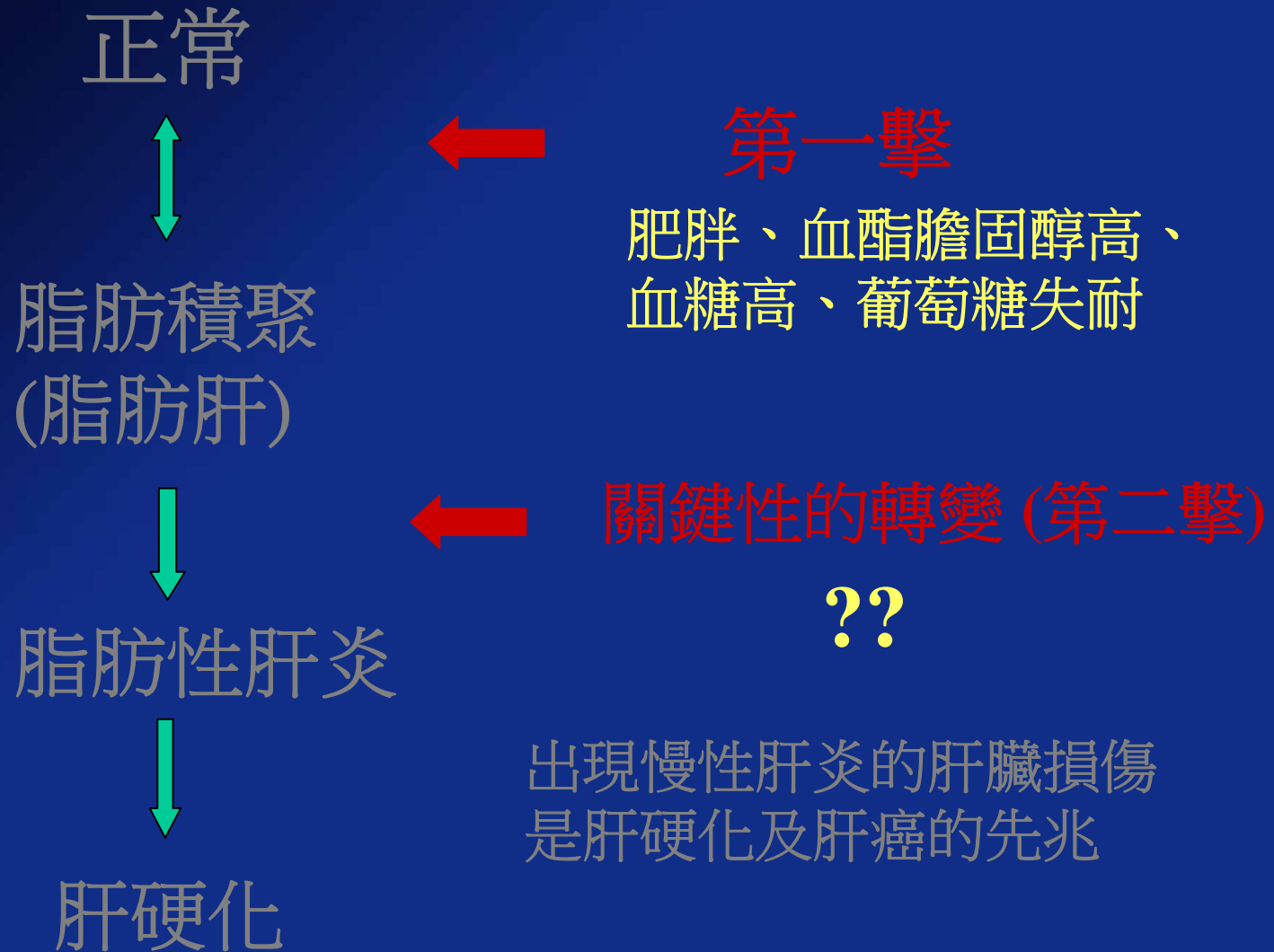
脂肪性肝炎



肝硬化

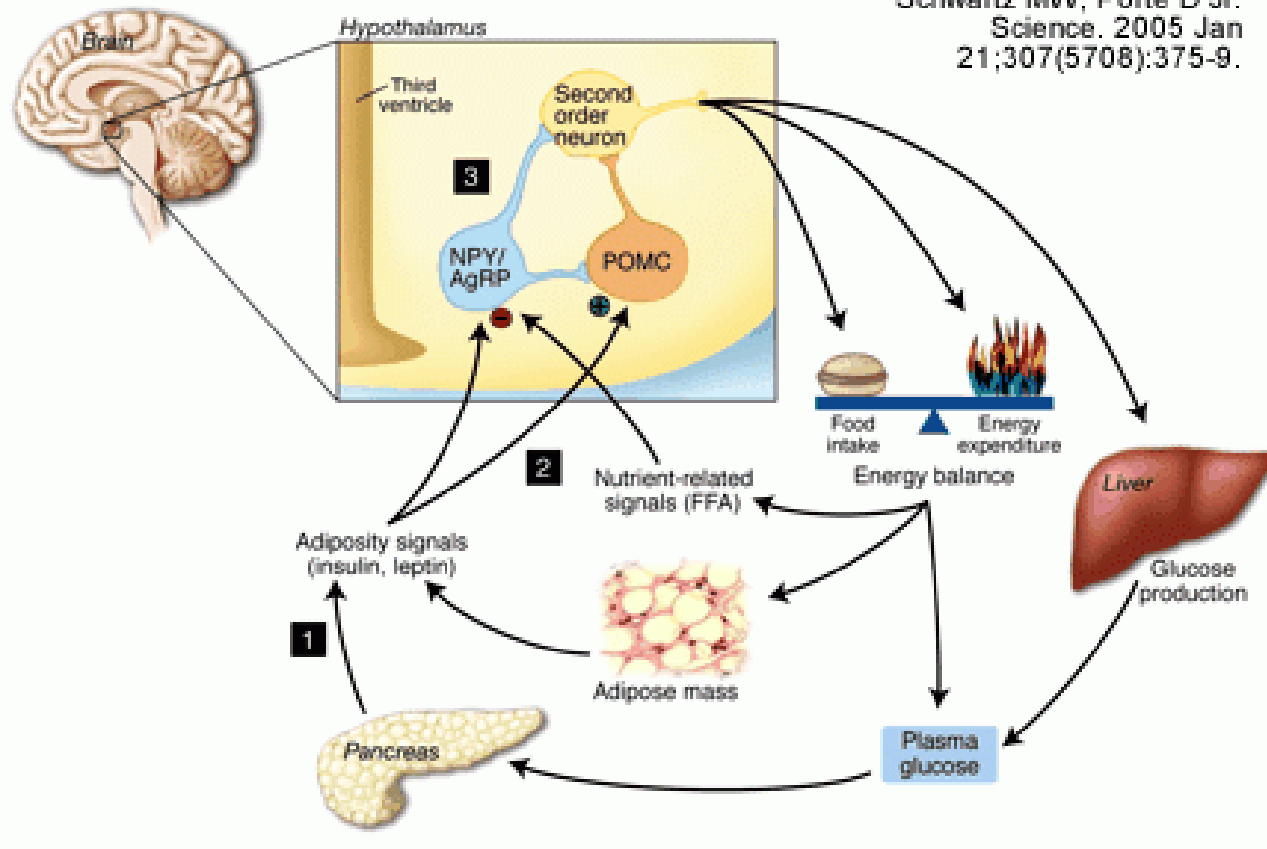
出現慢性肝炎的肝臟損傷  
是肝硬化及肝癌的先兆

# 脂肪性肝病的臨床幅度

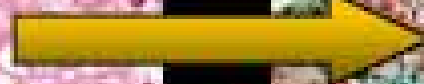
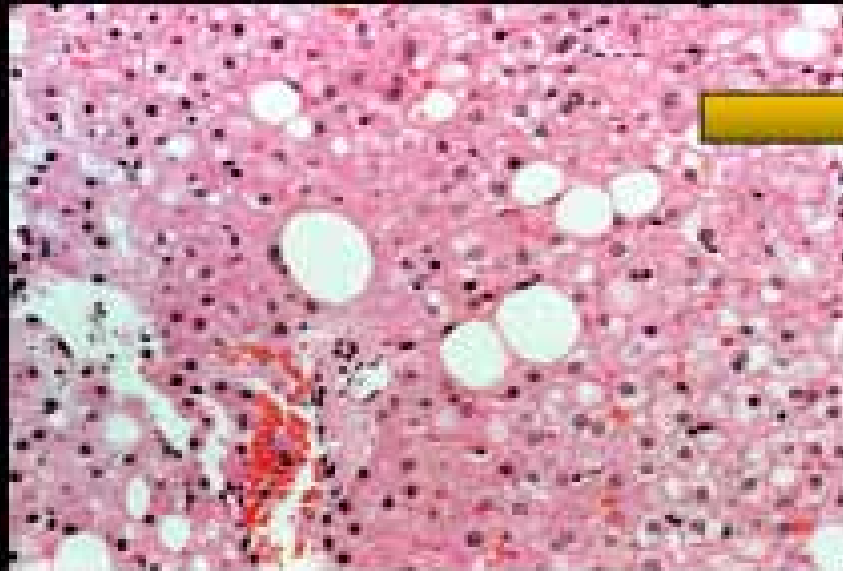


Neurocentric model depicting sites where defects in the negative feedback regulation of energy balance and glucose production predispose to weight gain and insulin resistance

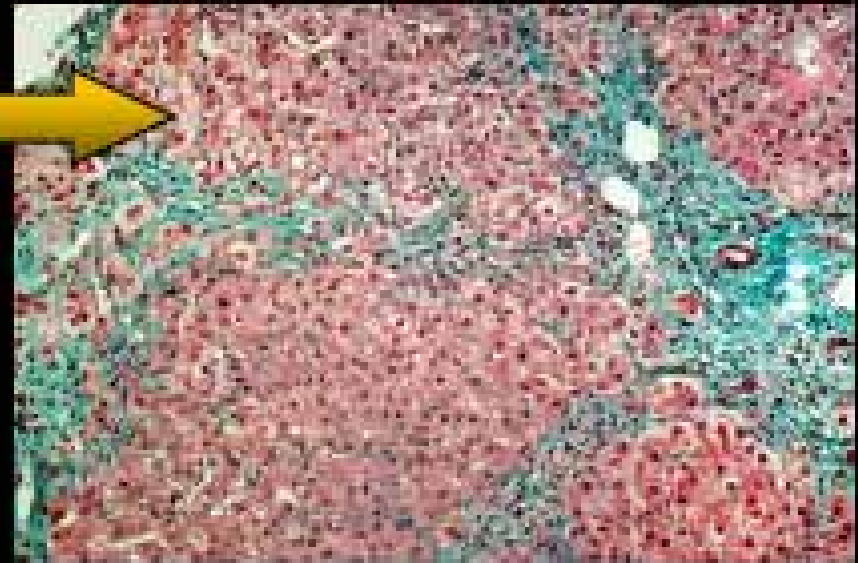
Schwartz MW, Porte D Jr.  
Science. 2005 Jan  
21;307(5708):375-9.







?



## 病情發展

- 在出現病徵時，30-40%患有非酒精引起的脂肪肝 (NAFLD) 的病人會有嚴重的肝臟纖維化，10-15% 的病人會有肝硬化
- 20年的定期復查顯示這類病人患上肝硬化的危機達20%

# 脂肪性肝病的臨床幅度

正常

斷症



脂肪積聚  
(脂肪肝)

超聲波掃描、電腦掃描



脂肪性肝炎

-驗血肝功能(每3-6個月)  
-肝組織檢查



肝硬化

# 病徵

- 無特定
- 無徵狀
- 疲累
- 間歇性的右上腹脹或不適

# 診斷



# 異常的化驗結果

- 谷丙轉氨酶 (ALT) 水平通常高於谷草轉氨酶 (AST) 水平
- 30-50% 的病人有葡萄糖耐受不正常
- 20-80% 的病人患有高三酸甘油酯血症

口服葡萄糖測試  
Oral Glucose Tolerance Curves & Who Criteria

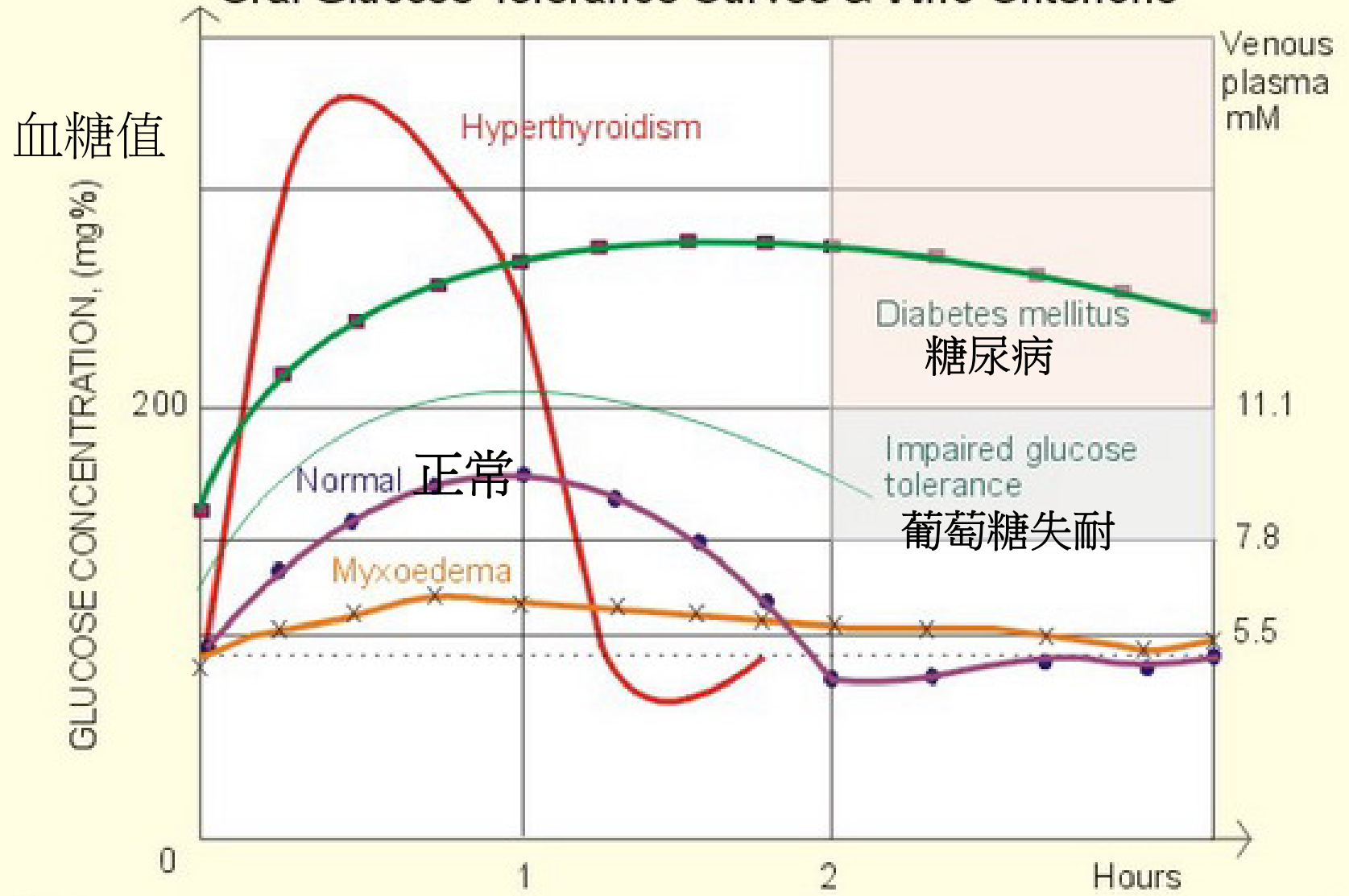


Fig. 27-6

# 藥物治療

## 控制危機因子

- 減低BMI 10%
- 帶氧運動 – 每次30分鐘，每星期四次
- 使用他汀類藥物(降血酯膽固醇)
- 治療糖尿病

Original Article

# A Placebo-Controlled Trial of **Pioglitazone (Actos)** in Subjects with **Nonalcoholic Steatohepatitis**

Renata Belfort, M.D., Stephen A. Harrison, M.D., Kenneth Brown, M.D., Celia Darland, R.D., Joan Finch, R.N., Jean Hardies, Ph.D., Bogdan Balas, M.D., Amalia Gastaldelli, Ph.D., Fermin Tio, M.D., Joseph Pulcini, M.D., Rachele Berria, M.D., Jennie Z. Ma, Ph.D., Sunil Dwivedi, M.D., Russell Havranek, M.D., Chris Fincke, M.D., Ralph DeFronzo, M.D., George A. Bannayan, M.D., Steven Schenker, M.D., and Kenneth Cusi, M.D.

N Engl J Med  
Volume 355(22):2297-2307  
November 30, 2006



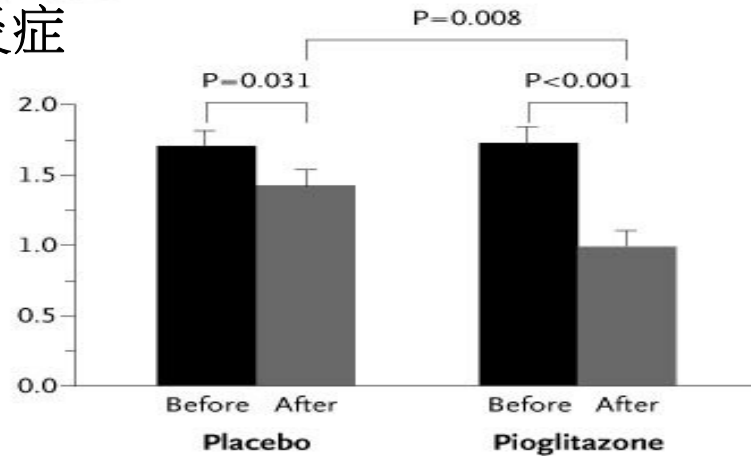
The NEW ENGLAND  
JOURNAL of MEDICINE



# 肝穿刺樣本 – 炎症 (Panel A), 細胞壞死 (Panel B), 脂肪積聚 (Panel C), 及纖維化 (Panel D) 平均指數

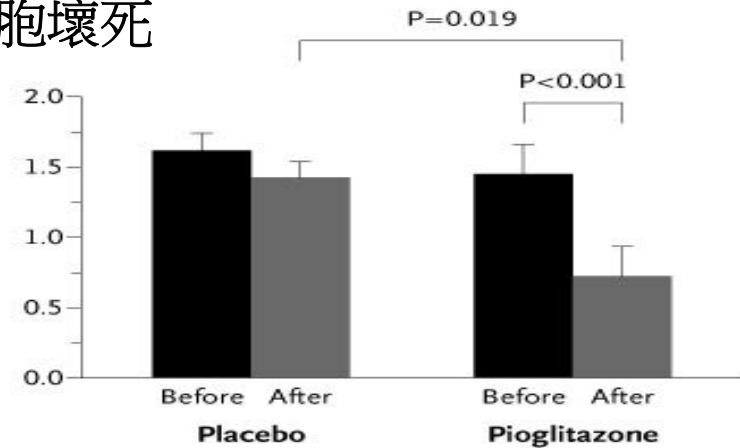
**A Inflammation**

**A. 炎症**



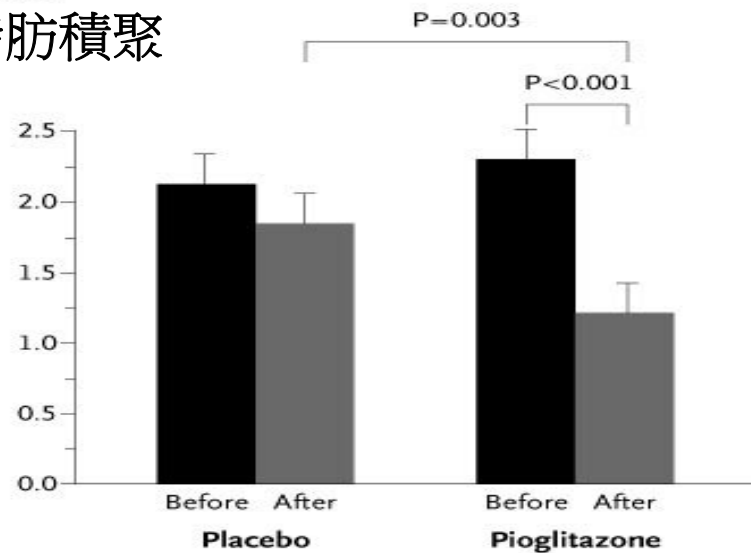
**B Ballooning Necrosis**

**B. 細胞壞死**



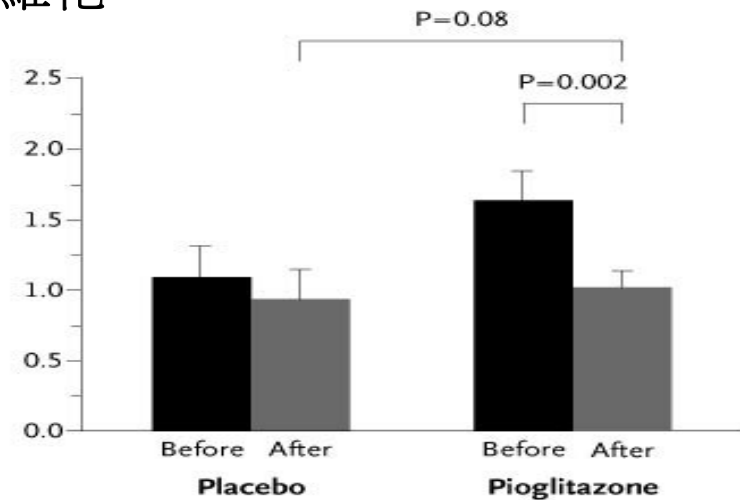
**C Steatosis**

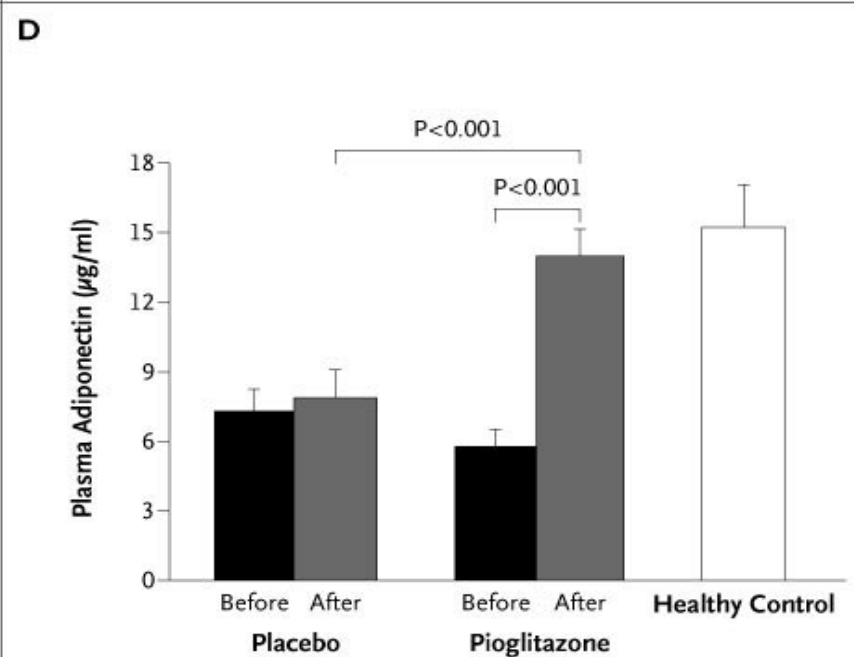
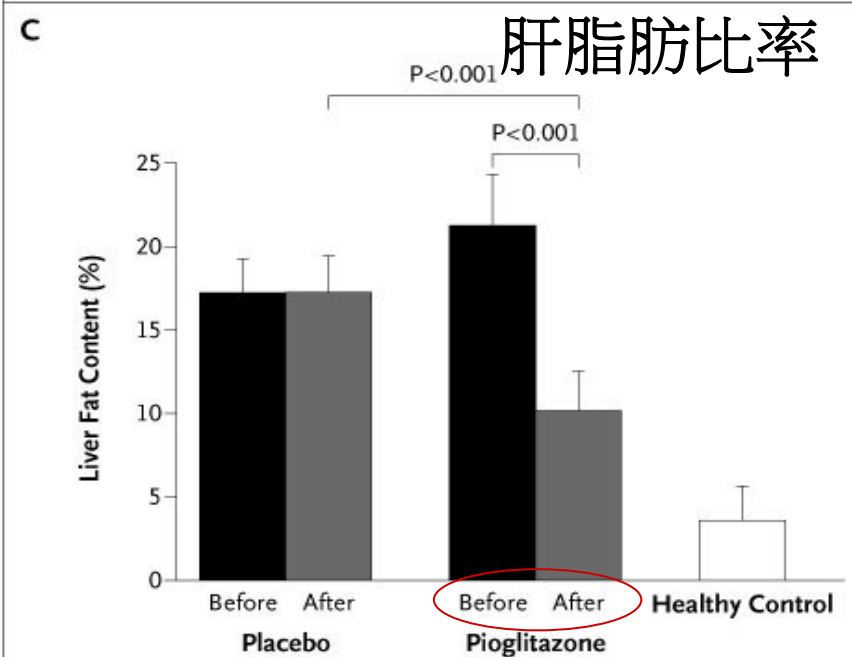
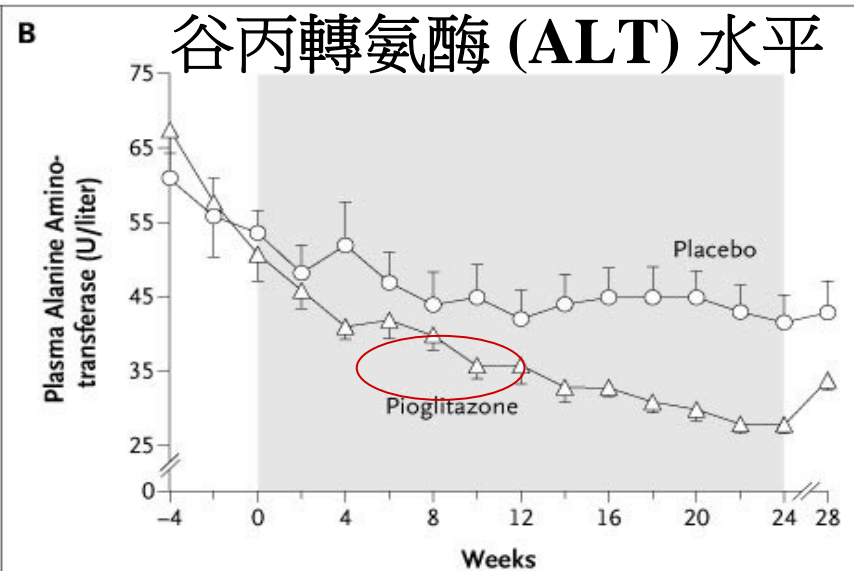
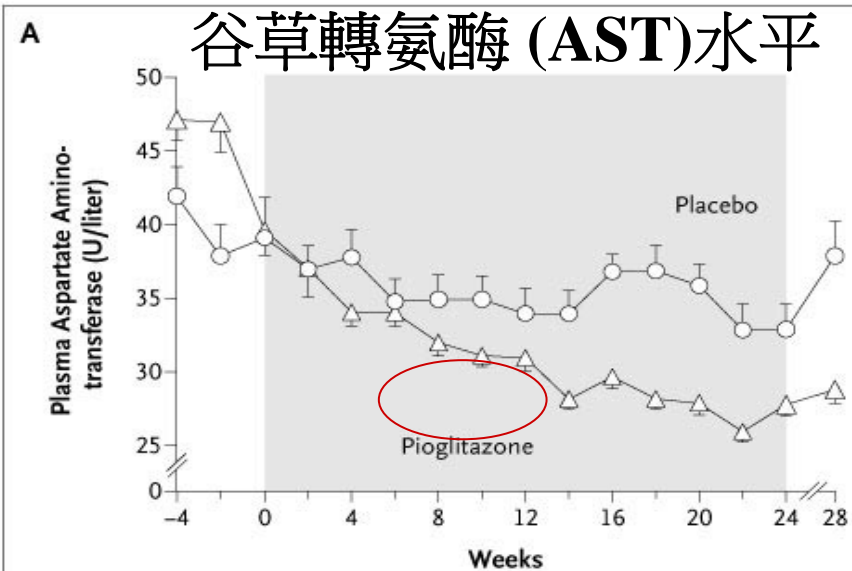
**C. 脂肪積聚**



**D Fibrosis**

**D. 纖維化**





# 總結

- 脂肪肝病漸趨普遍
- 脂肪肝病可導致肝硬化
- 脂肪肝病應評估(肥胖、血脂膽固醇高、血糖高、葡萄糖失耐)
- 脂肪肝病應定期跟進 (每3-6個月 驗血肝功能)
- 脂肪肝炎應治療、藥物治療果效高



# 胃酸倒流(GERD)

# 甚麼是胃酸倒流?

- 胃部的食物及胃酸倒流入食道
- 一個在飯後特別容易出現的生理現象

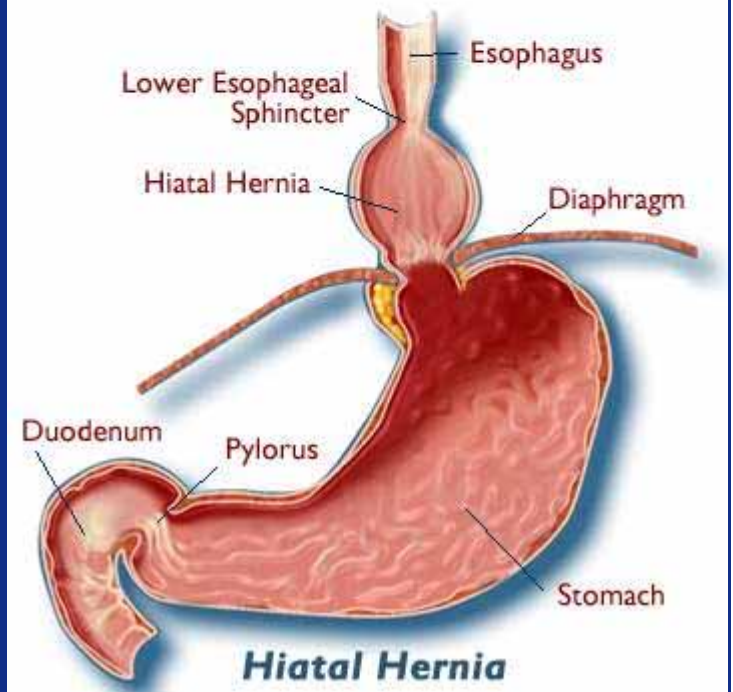
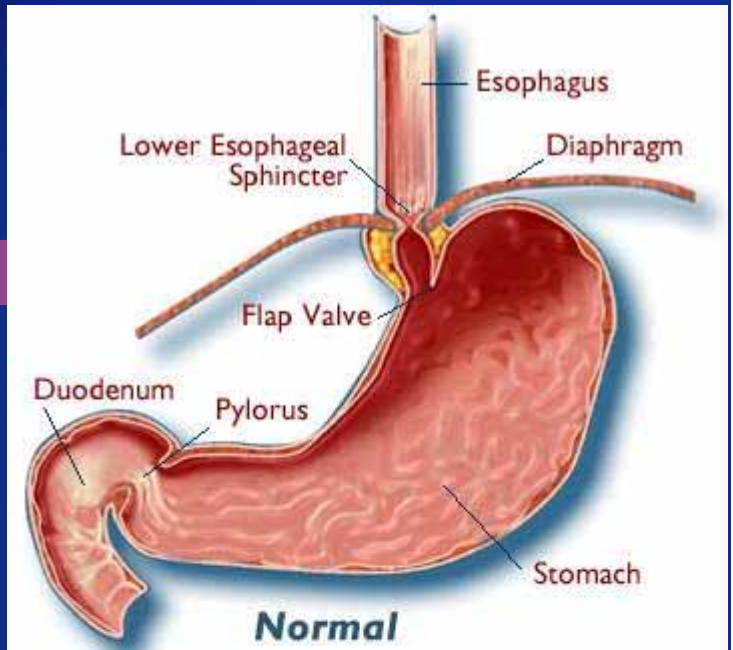
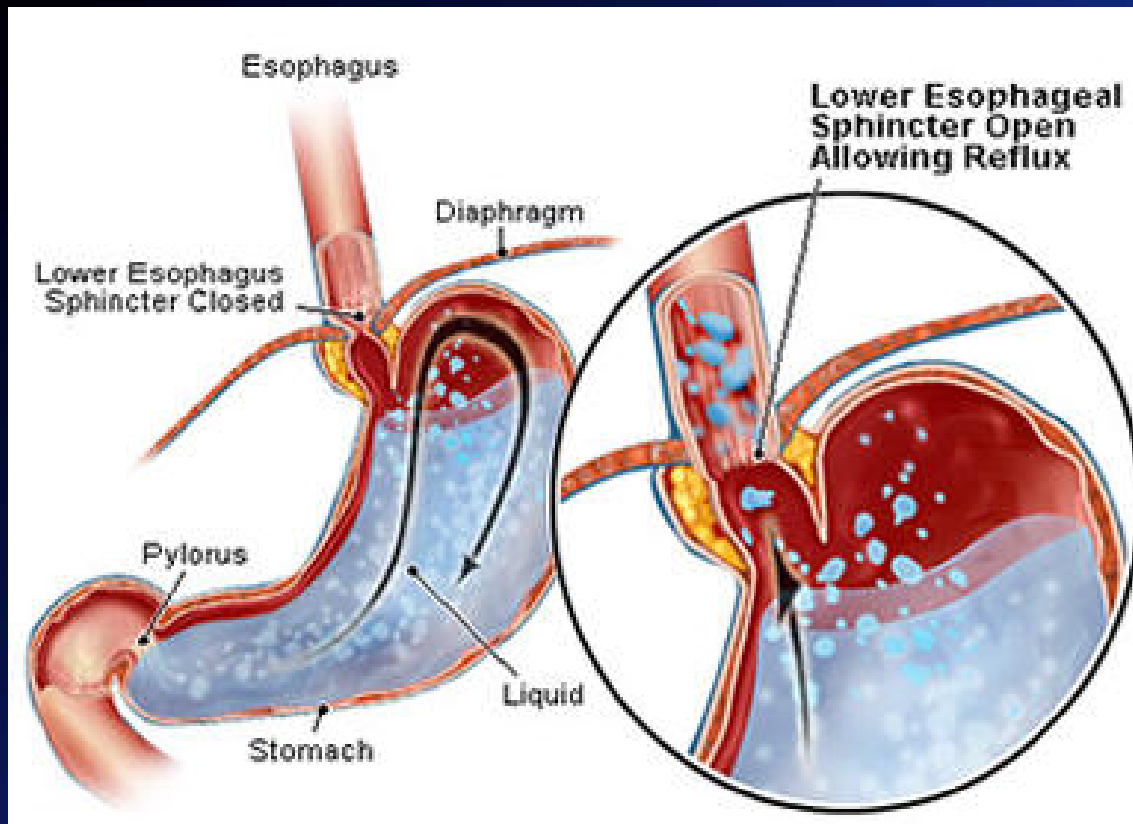


# 甚麼時候胃酸倒流是一種病？

當胃酸倒流導致：

- 併發症
- 影響生活質素的病徵

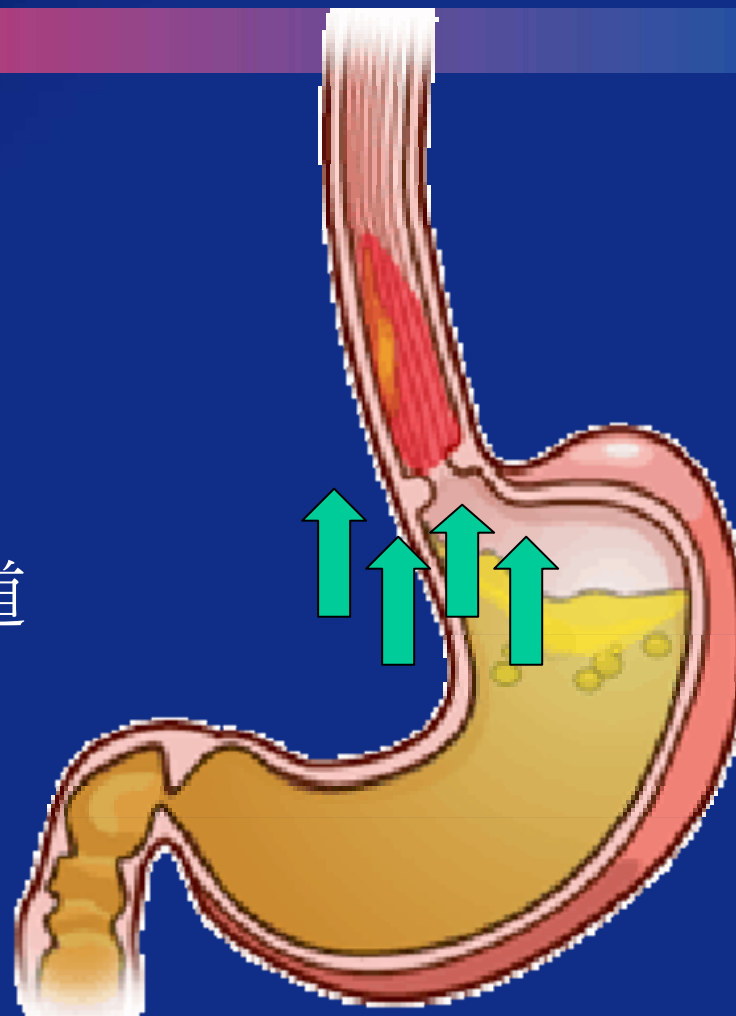




# 受損的下食道括約肌(LES)

## ● 機制

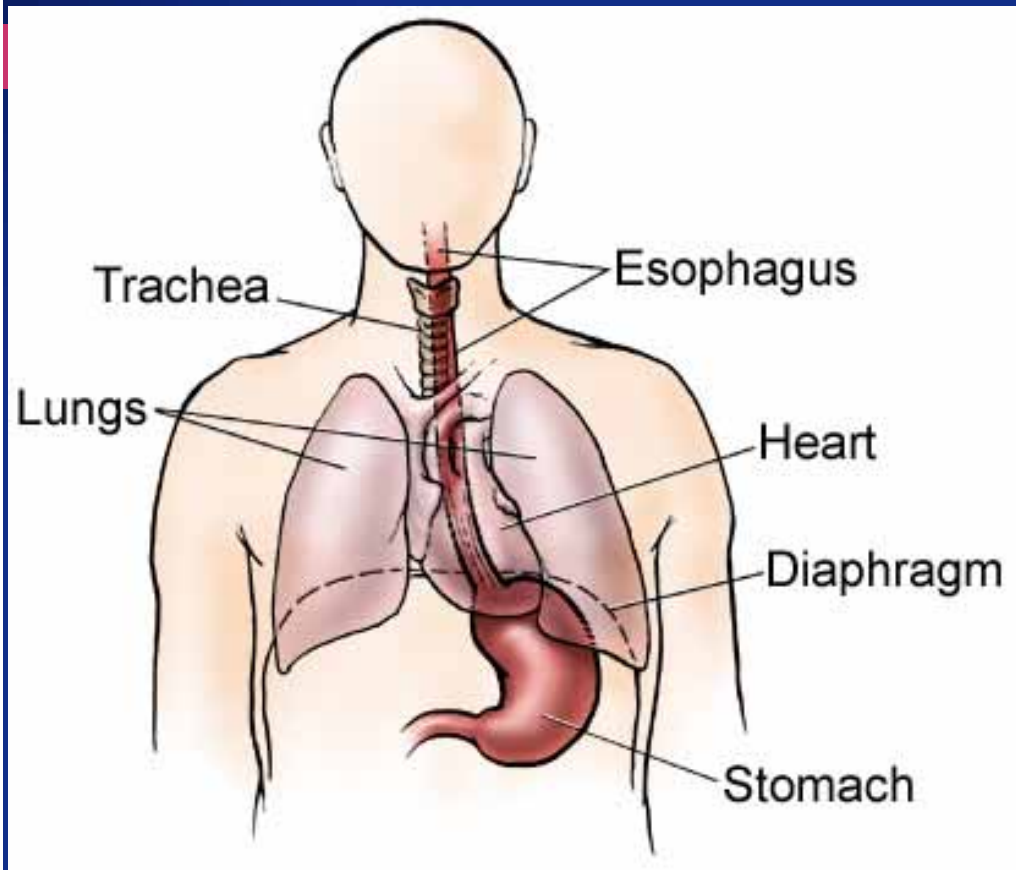
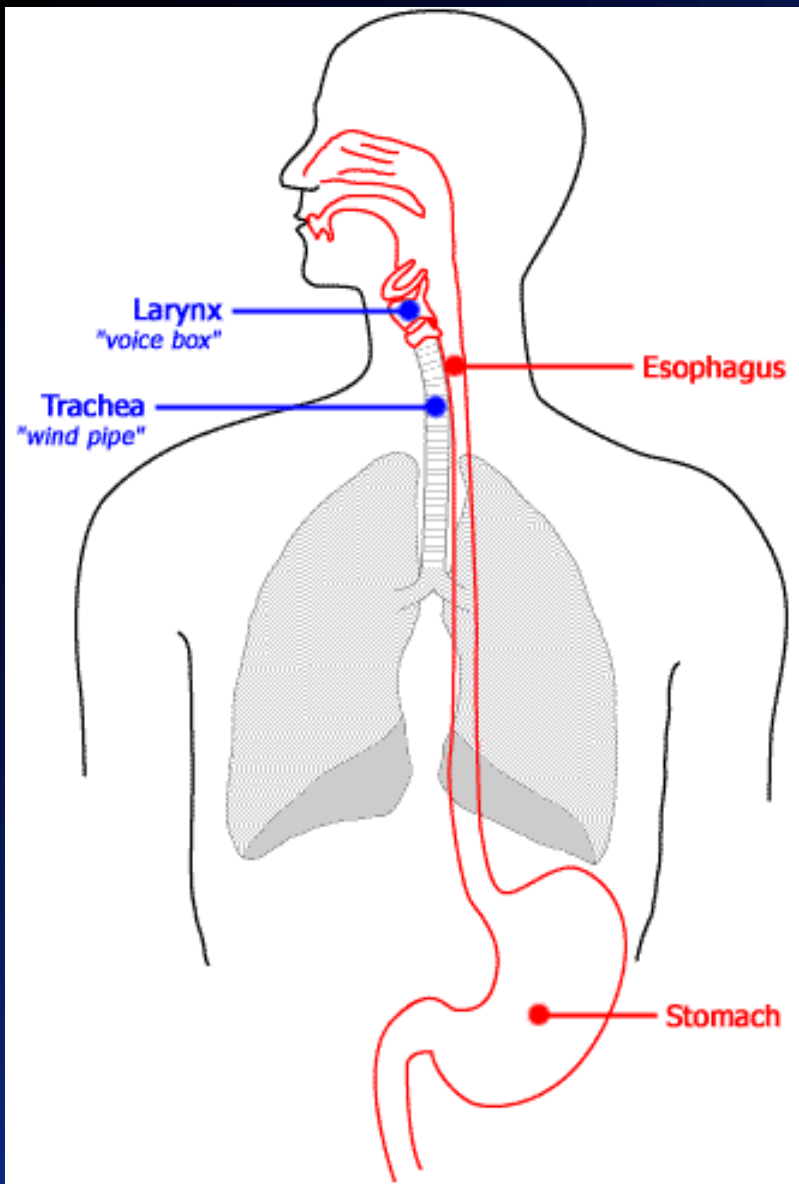
- 西化的飲食
- 胃排空減緩
- 胃部持續膨脹，對下食道括約肌造成壓力





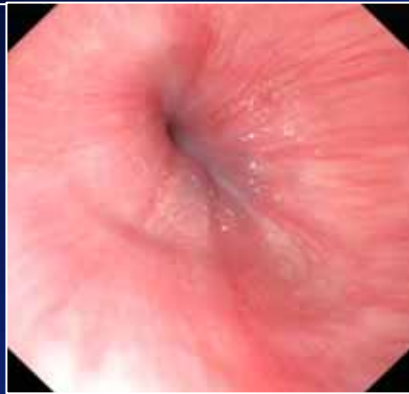
# 胃酸倒流的典型病徵

- 胃酸倒流
- 胸口灼熱
- 通常在進食後1-3個小時後出現
- 躺臥、向前傾及伸展身體會偶爾使情況惡化
- 打嗝並不是胃食道逆流的病徵



# 胃酸倒流的幅度

內窺鏡  
胃酸反流陰性



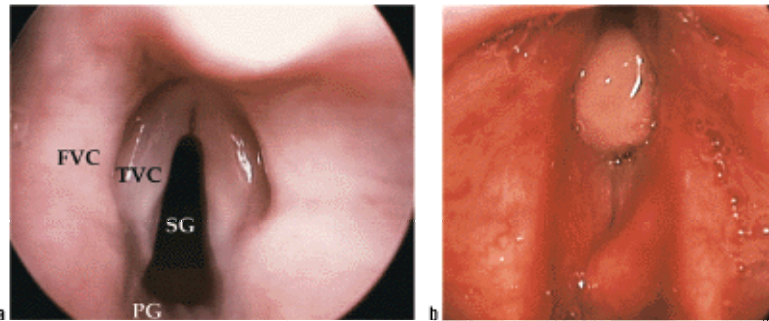
倒流性食道炎

Barrett 食道 /  
腺癌

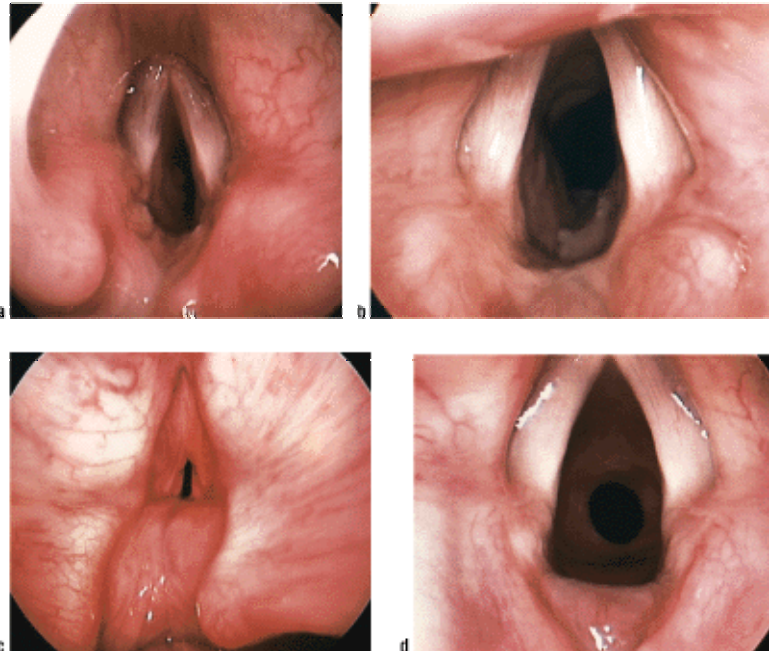


消化道收窄





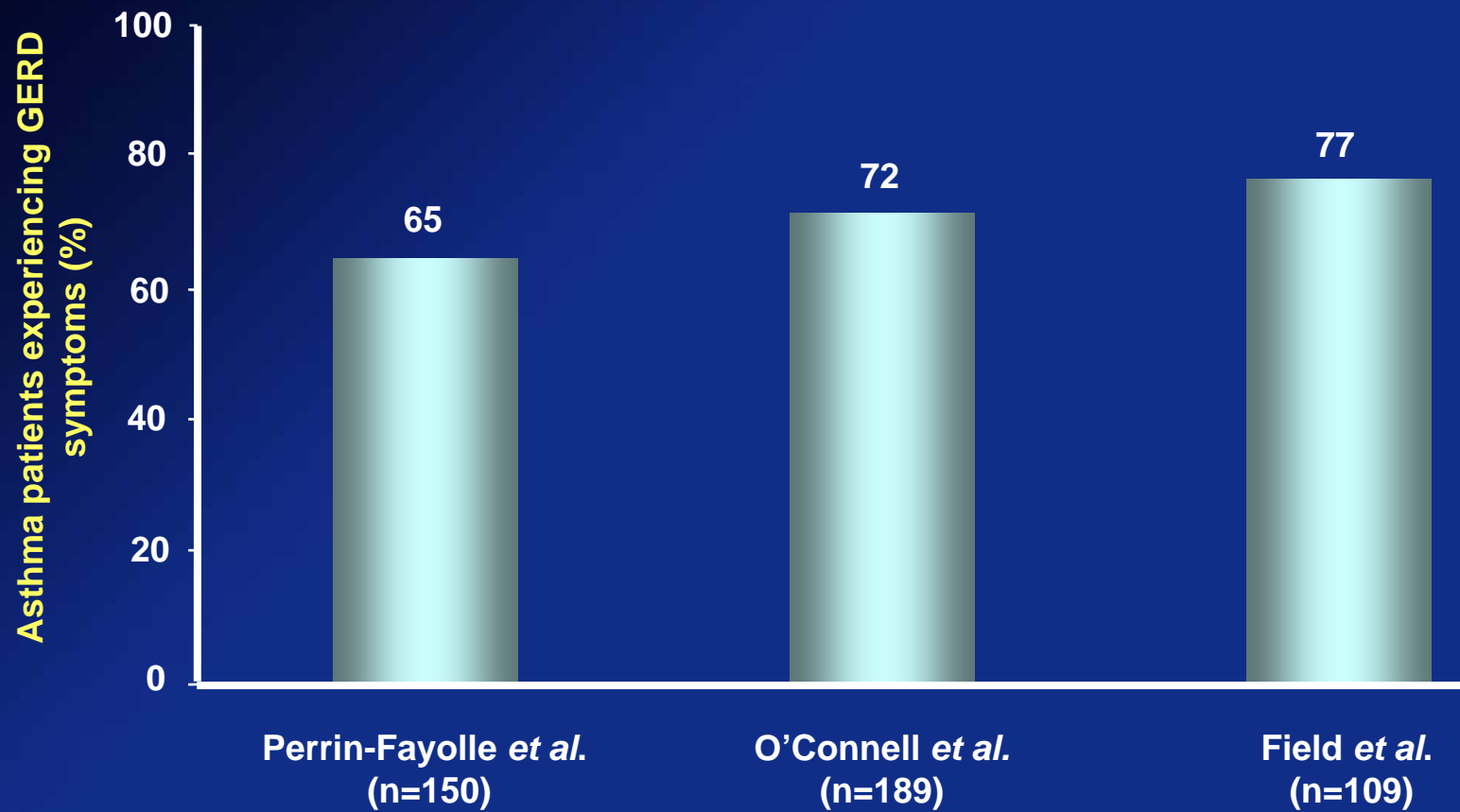
**Figure 1. Laryngeal contact granuloma.** a. Micro-laryngoscopic view of normal larynx reveals thin mucosal covering of false vocal cord (FVC), true vocal cord (TVC), and posterior glottis (PG) and normal caliber of subglottis (SG). b. Round, pale contact granuloma at level of glottis fills middle and anterior airway. Entire supraglottis and glottis are hyperemic and edematous.



**Figure 2. Reflux laryngitis.** a. In early posterior laryngitis, hyperemia and telangiectasias are seen throughout supraglottic and glottic larynx. Mucosa overlying posterior glottis and false vocal cords shows edema, erythema, and early granulation tissue formation. b. In subglottic laryngitis, subglottic airway is irregular in shape and has extensive mucosal cobblestoning. Posterior subglottic airway shows early granulation tissue formation. c. In late pan-glottic laryngitis, severe laryngeal edema, hyperemia, erythema, and mucosal hypertrophy are present throughout larynx. Mucosal webbing is visible at anterior commissure, and glottic opening is stenotic. d. In subglottic stenosis, long-standing, untreated gastroesophageal reflux can result in severe, circumferential subglottic stenosis.



# 胃酸倒流可引發哮喘



# 胃酸倒流的檢查

- 病徵
- 質子泵抑制劑(PPI)測試
- 內窺鏡
- 酸鹼度(pH)考察
- 食道阻抗

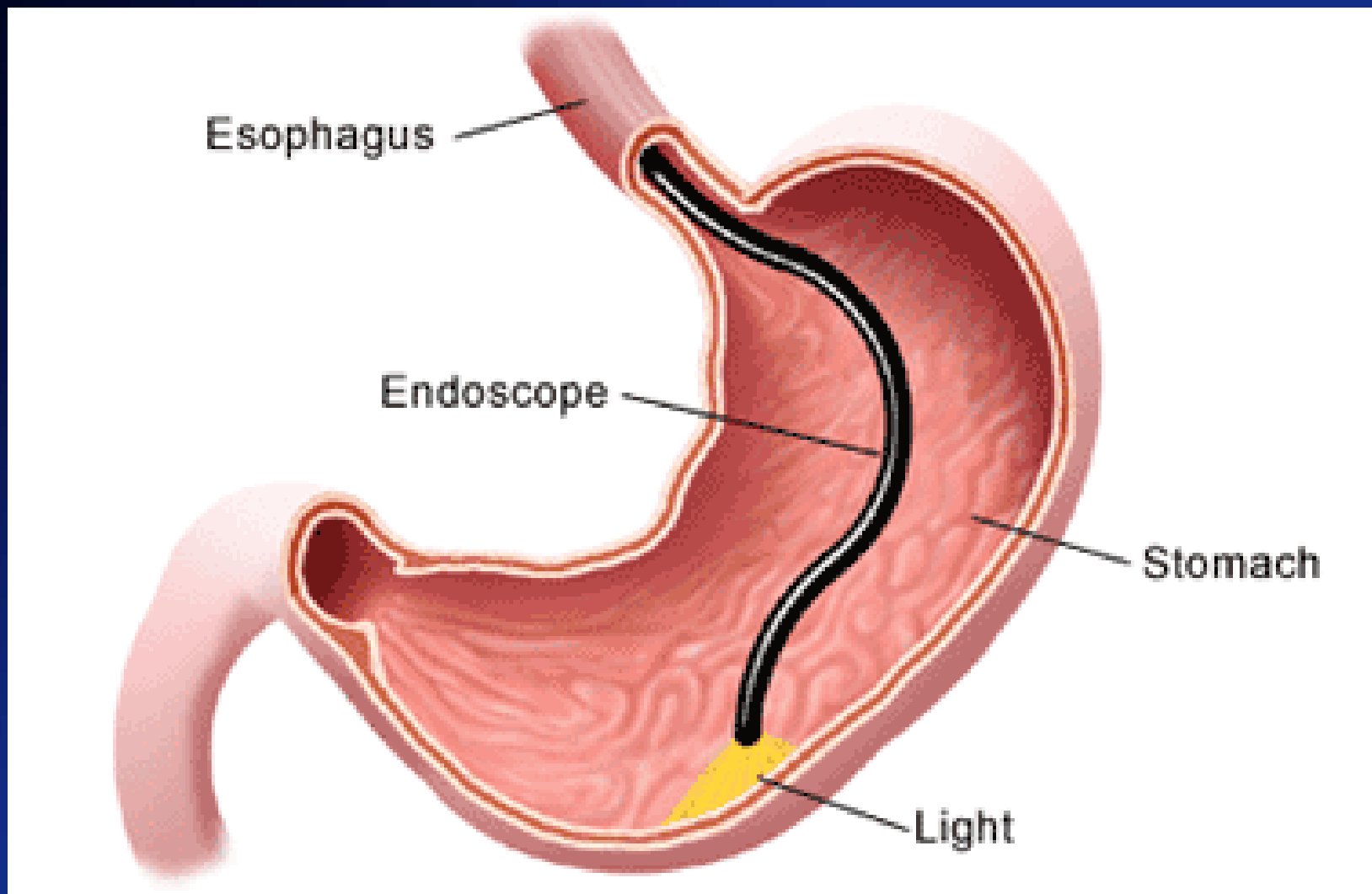


# 胃酸倒流的檢查

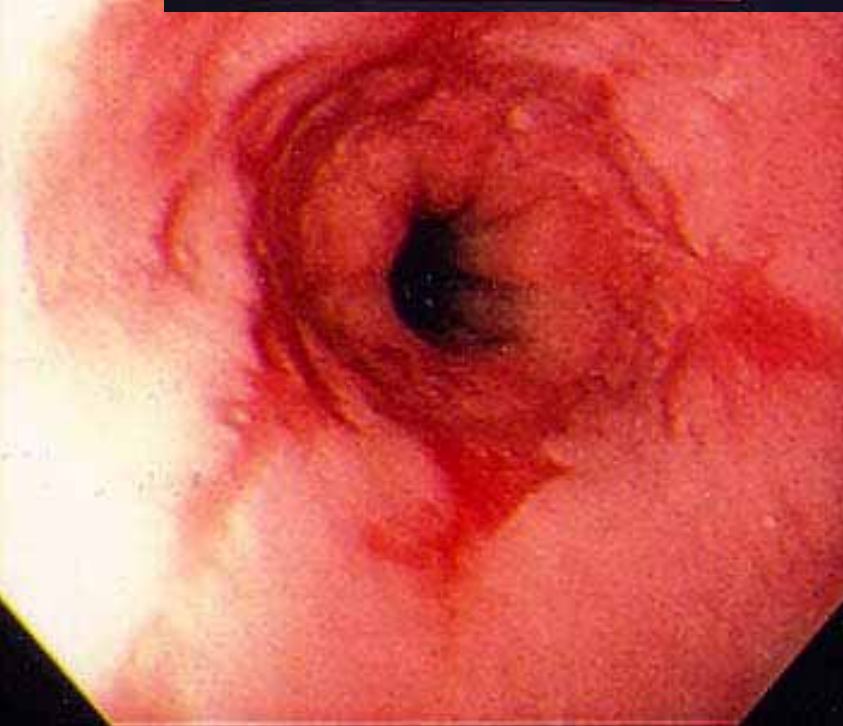
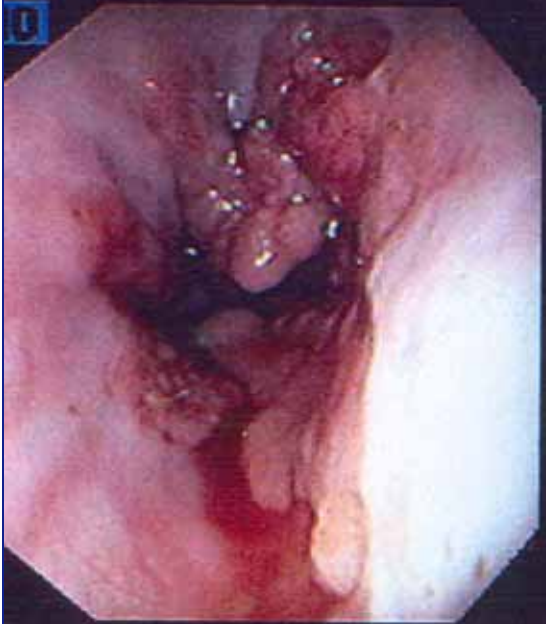
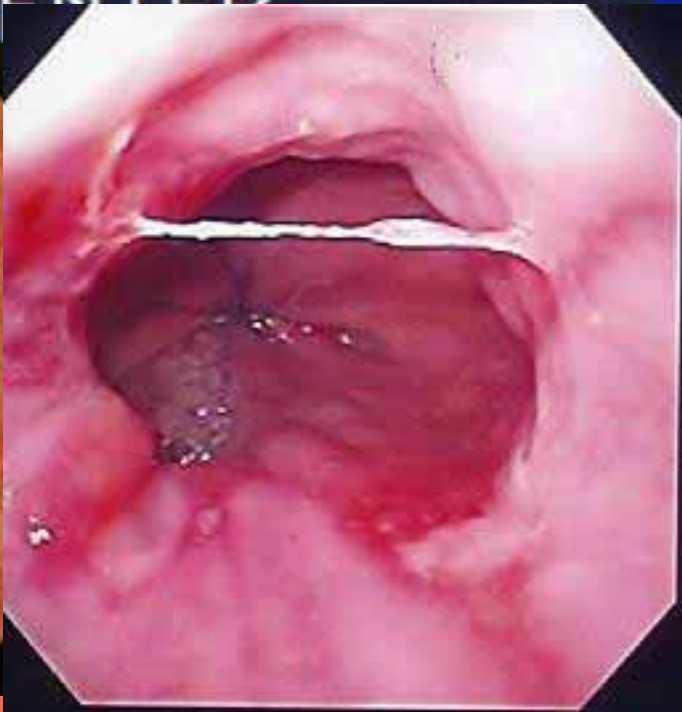
- 病徵
- 質子泵抑制劑(PPI)測試
- 內窺鏡
- 酸鹼度(pH)考察
- 食道阻抗



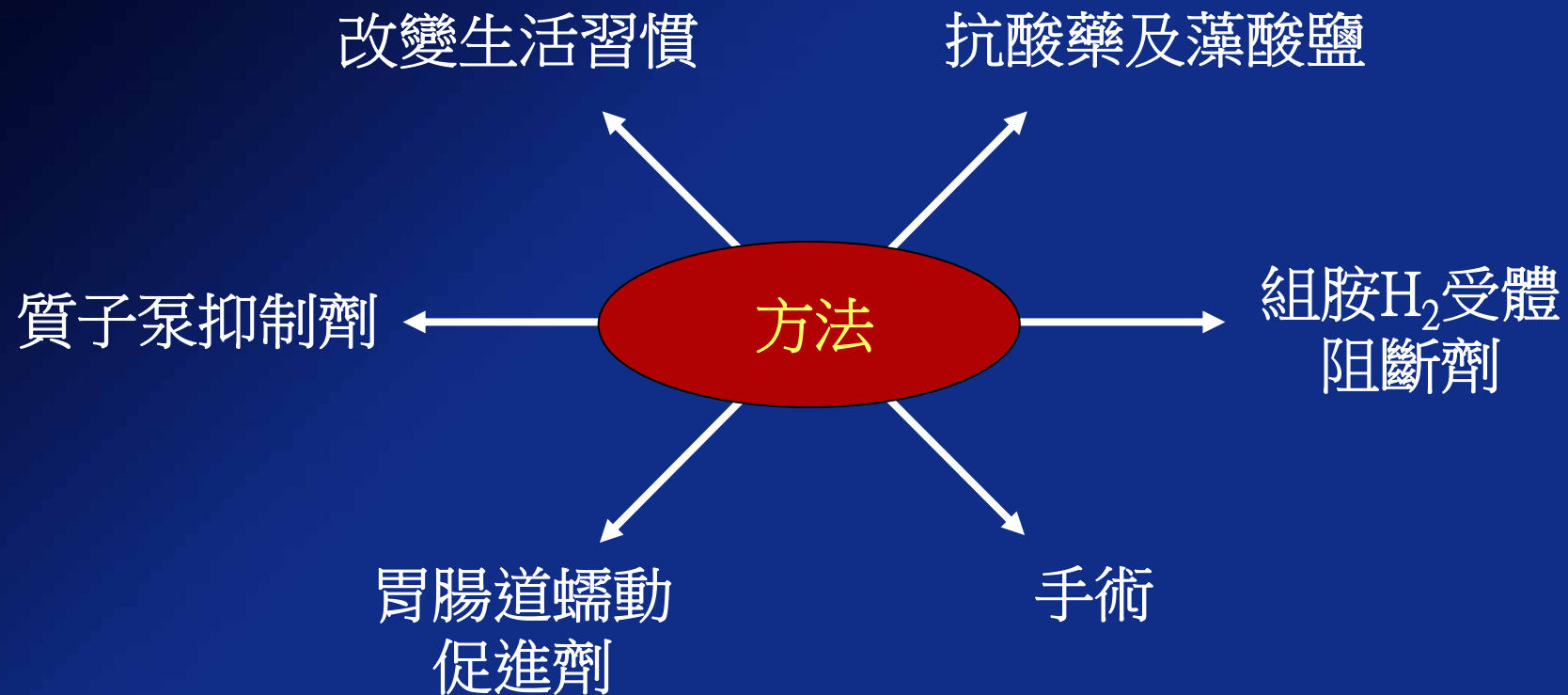
# 內窺鏡







# 胃酸倒流的治療選擇



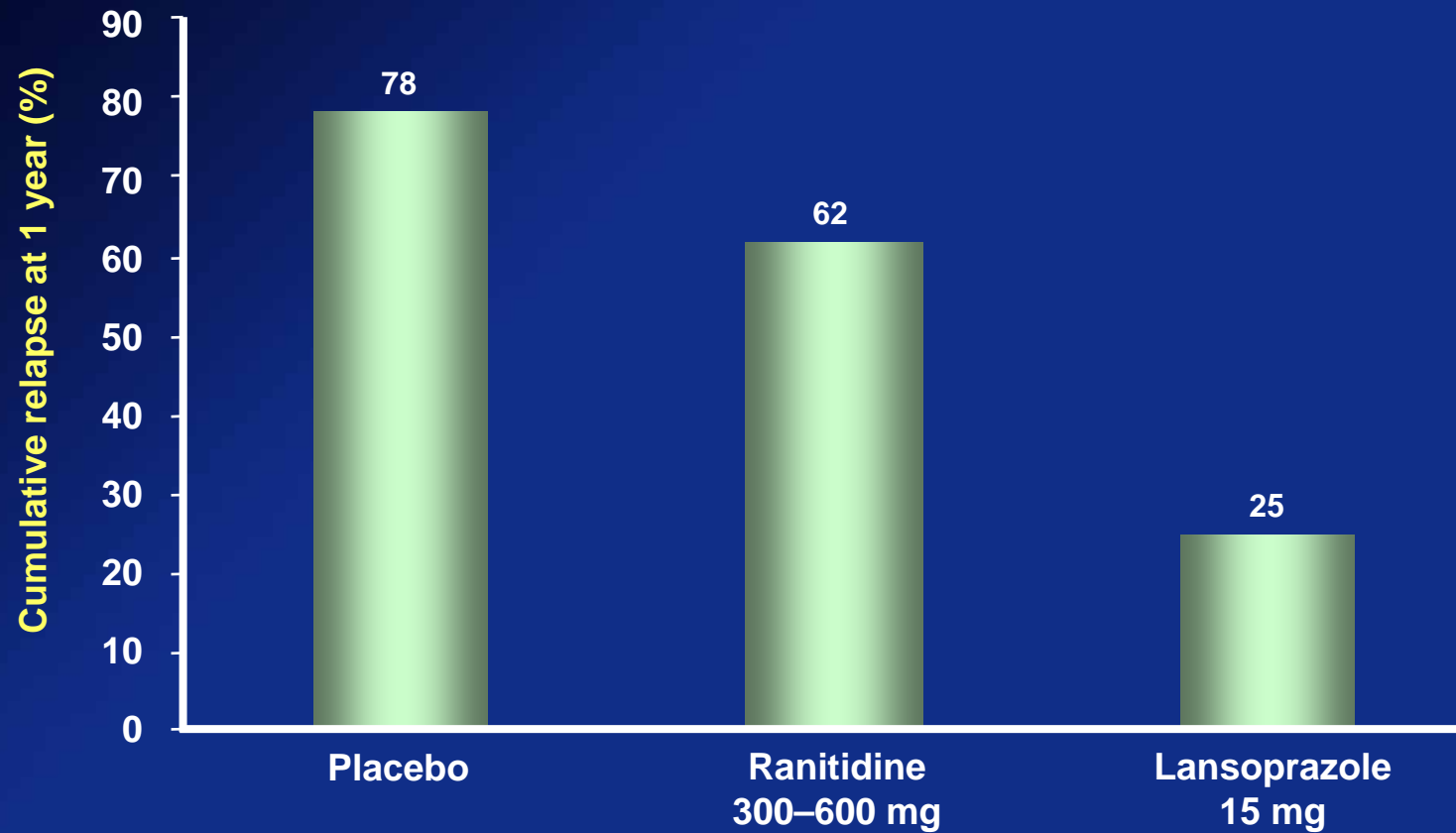
# 質子泵抑制劑緩和胃灼熱的速度



n=3510 patients with erosive GORD diagnosed by endoscopy randomised to study

Richter *et al.*, *Am J Gastroenterol* 2001; **96**: 3089–98.

# 胃酸倒流的維持治療： 質子泵抑制劑vs組胺H<sub>2</sub>受體阻斷劑

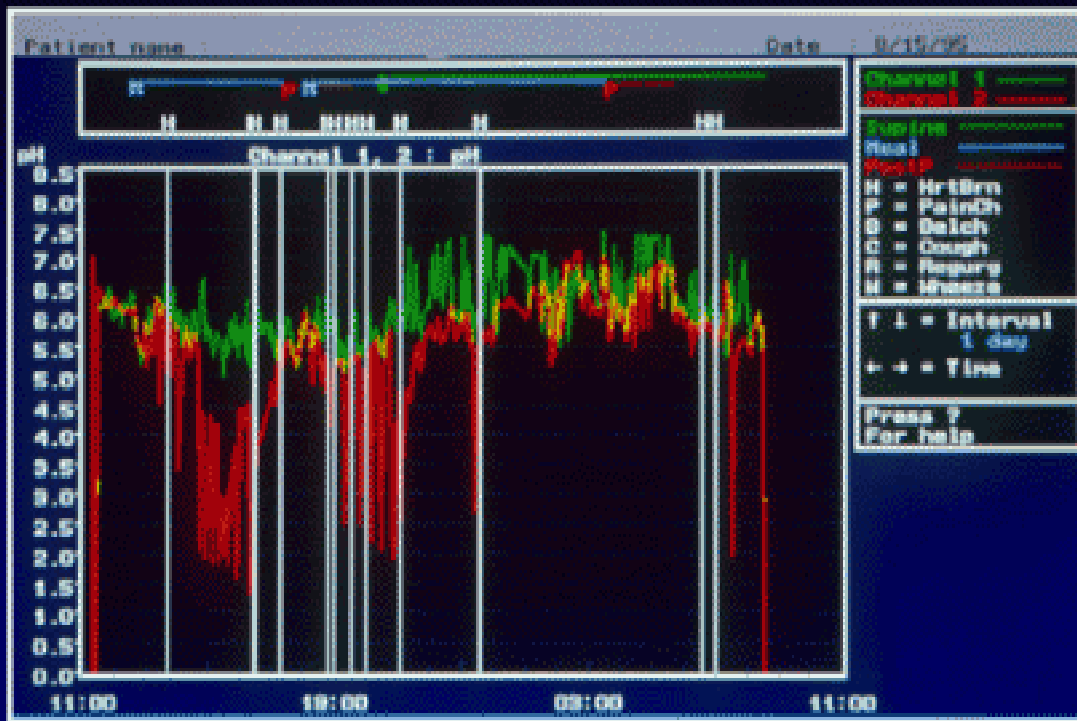


# 總結

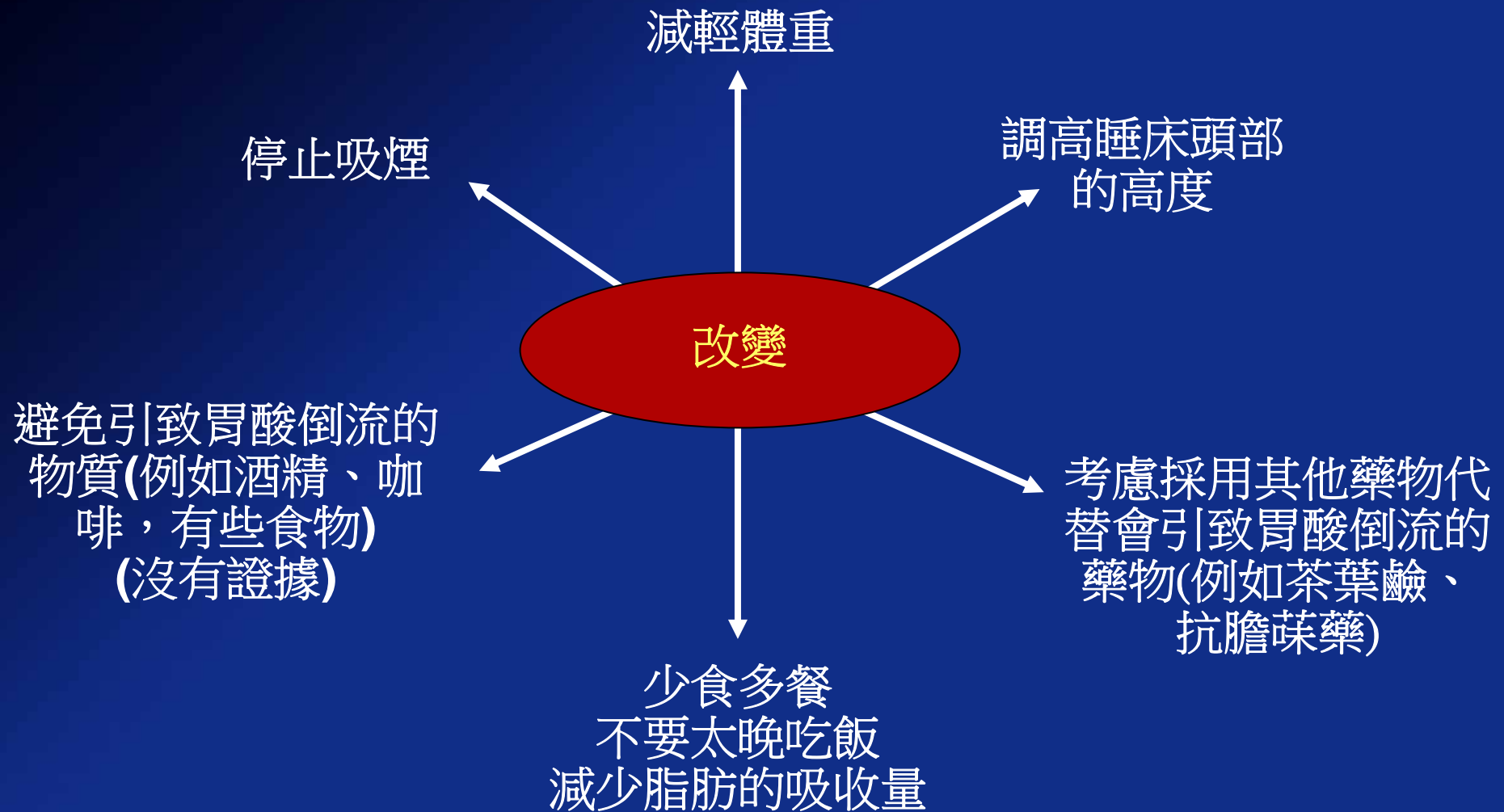


- 胃酸倒流莫忽視
- 胃鏡診斷準而清
- 藥療成效確顯著
- 癌症機會再減低

# Normal 24-Hour Esophageal pH Study



# 改變生活習慣以控制胃酸倒流





# 消化性潰瘍 (PUD)



# 胃炎及消化性潰瘍的起因

- 幽門螺桿菌(*H. pylori*)感染
  - ~80% 胃潰瘍及95%十二指腸潰瘍的病人受幽門螺桿菌感染
- 經常使用非類固醇類抗炎藥物(NSAIDs)
- 使用細胞抑制劑或類固醇
- 酒精、吸煙及/或壓力
- 胃液分泌過多、胃泌素過多、胃排空速度加快、沒有血型A的抗原及基因

# 消化性潰瘍的病徵

- 上腹部絞痛/灼痛
- 噁心
- 體重降低
- 喪失食慾
- 疲累

# 急性胃潰瘍



潰瘍

# 出血性胃潰瘍



# 急性出血性潰瘍的病徵及跡象

## ● 病徵

- 黑糞症 - 糞便呈黑褐色(瀝青便)
- 吐血 - 由口腔吐出血液(因為胃酸的關係血會變成咖啡色)

## ● 跡象

- 心跳過速
- 臉色蒼白
- 出汗
- 四肢冰冷
- 暈厥
- 困倦
- 困惑

# 十二指腸潰瘍



# 出血性十二指腸潰瘍



# 消化性潰瘍的診斷

## ● 病歷

- 有否使用非類固醇類抗炎藥物(**NSAID**)

## ● 內窺鏡

- >45 歲
- 有警示症狀的病人
- 曾患有胃潰瘍
- 家族中有人曾患胃潰瘍/有其他危機因子

## ● 幽門螺桿菌(*H. pylori*)測試



# 胃潰瘍 vs 十二指腸潰瘍

## 胃潰瘍

- 在40歲之前並不常見
- 痛楚通常由進食引起，而禁食會減緩痛楚
- 胃酸分泌正常
- 體重可能降低
- 有可能吐血

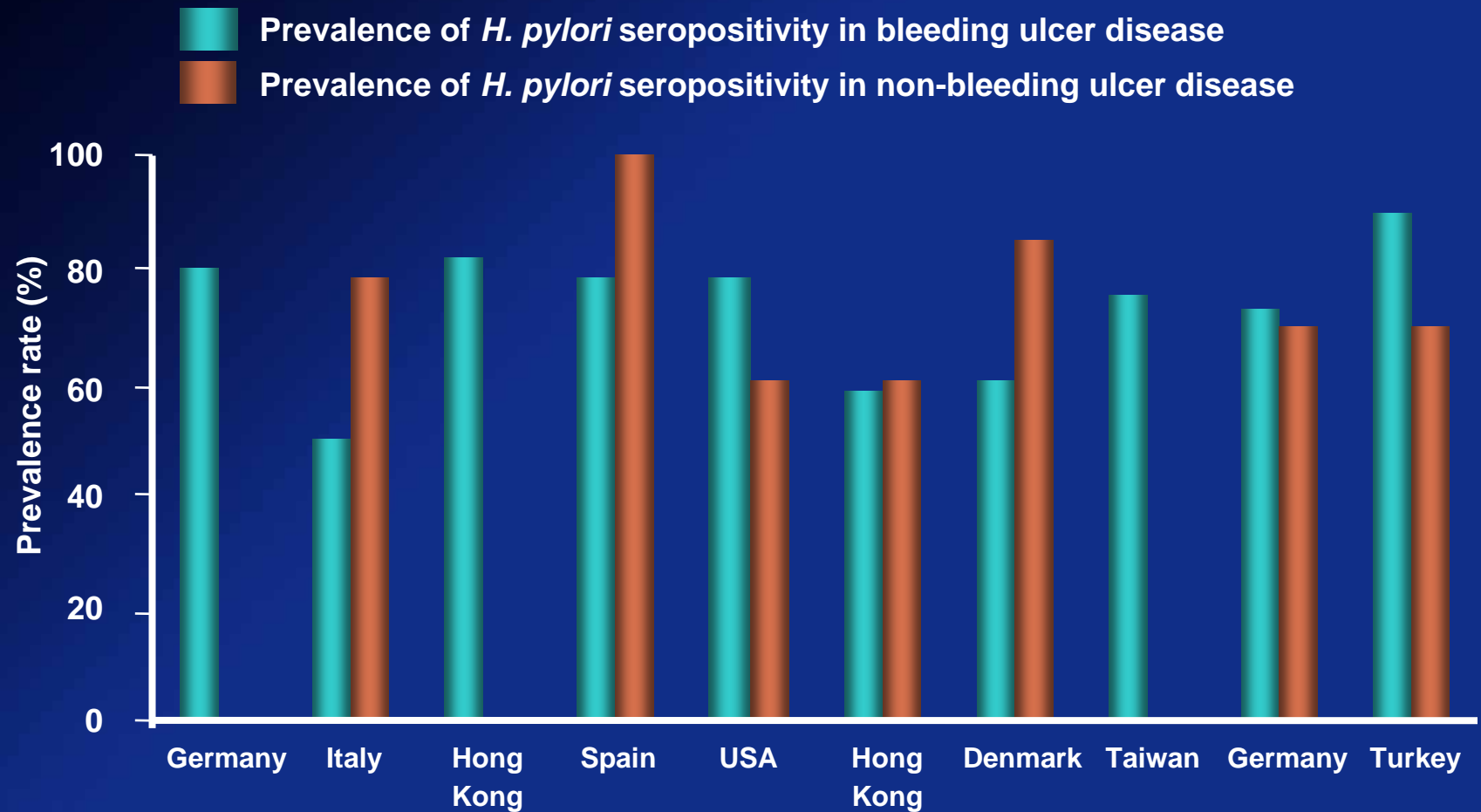
## 十二指腸潰瘍

- 大部份病人介乎25至55歲
- 痛楚通常在夜間發生，可暫時由進食及抗酸藥減緩
- 胃酸分泌過多
- 體重不會下降
- 可能有黑糞症



幽門螺桿菌  
*(H. pylori)*

# 幽門螺桿菌在消化性潰瘍中的病發率



# 可能導致幽門螺桿菌感染的危機因子

## ● 年齡

- 於發展中國家在幼年時快速受感染

## ● 感染地

- 於發展中國家抗體陽性的比率較高

## ● 收入

- 收入與抗體陽性成反比

## ● 性別

- 兩性有相似的發病率

## ● 家族

- 家族集結？配偶之間經口部/腸胃相互傳染？

## ● 酒精

- 不會增加風險

## ● 血型

- 大部份研究顯示沒有聯繫

## ● 吸煙

- 不會增加風險

# 診斷測試

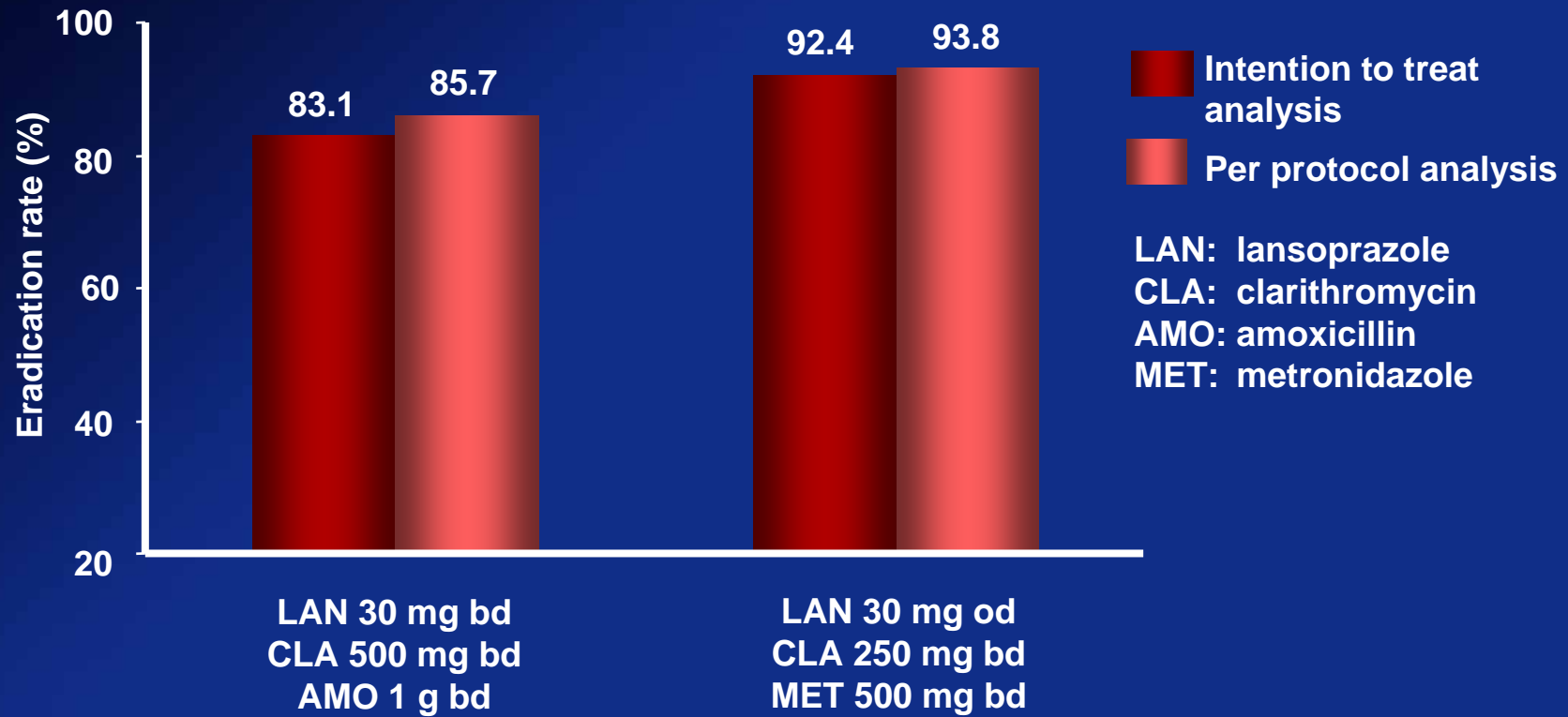
## ● 非內窺鏡

- 抗體檢測
- 尿素呼氣試驗
- 糞便抗原測試

## ● 內窺鏡

- 尿素酶試驗
- 組織結構檢查
- 細菌培植

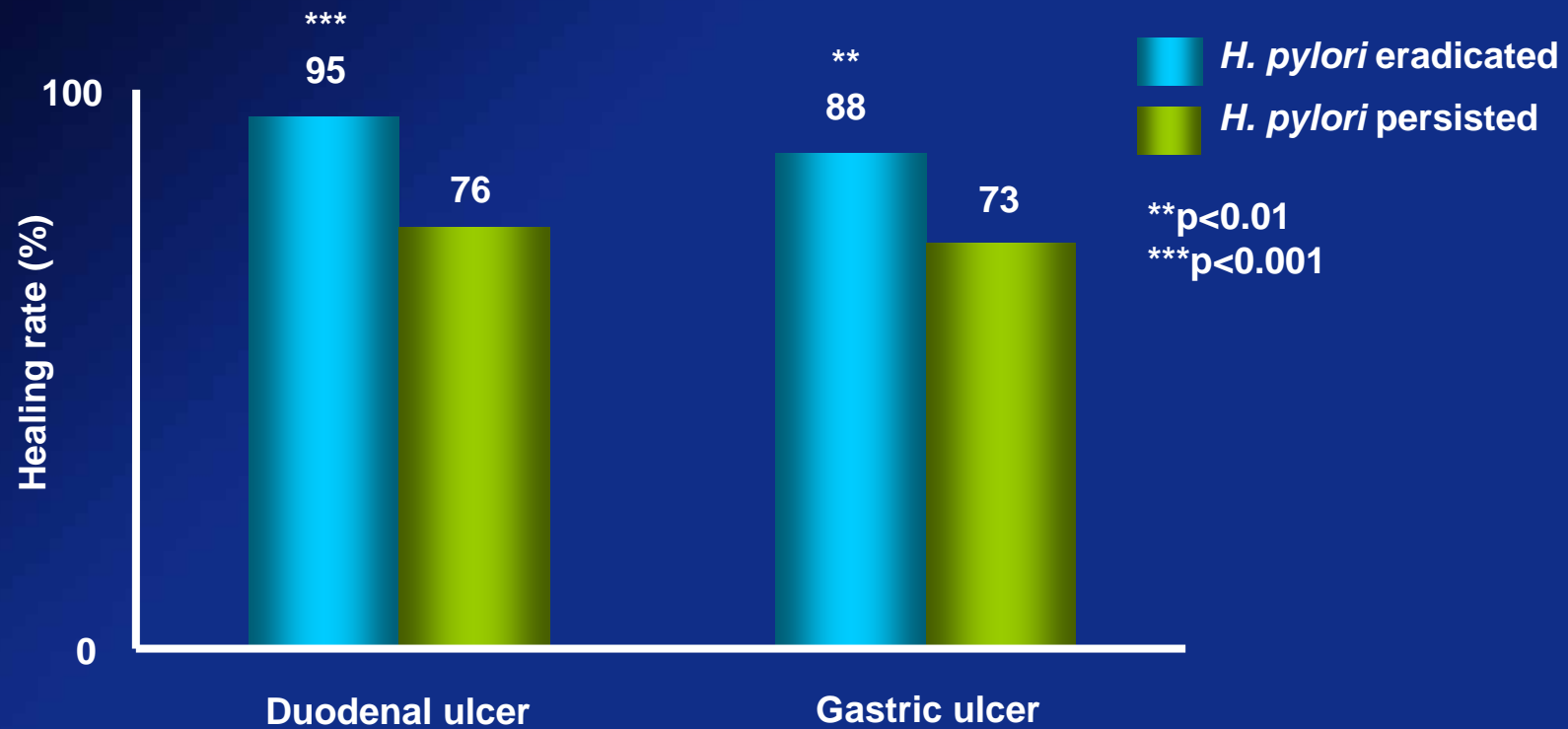
# Lansoprazole加上兩種抗生素 根除幽門螺桿菌的效能



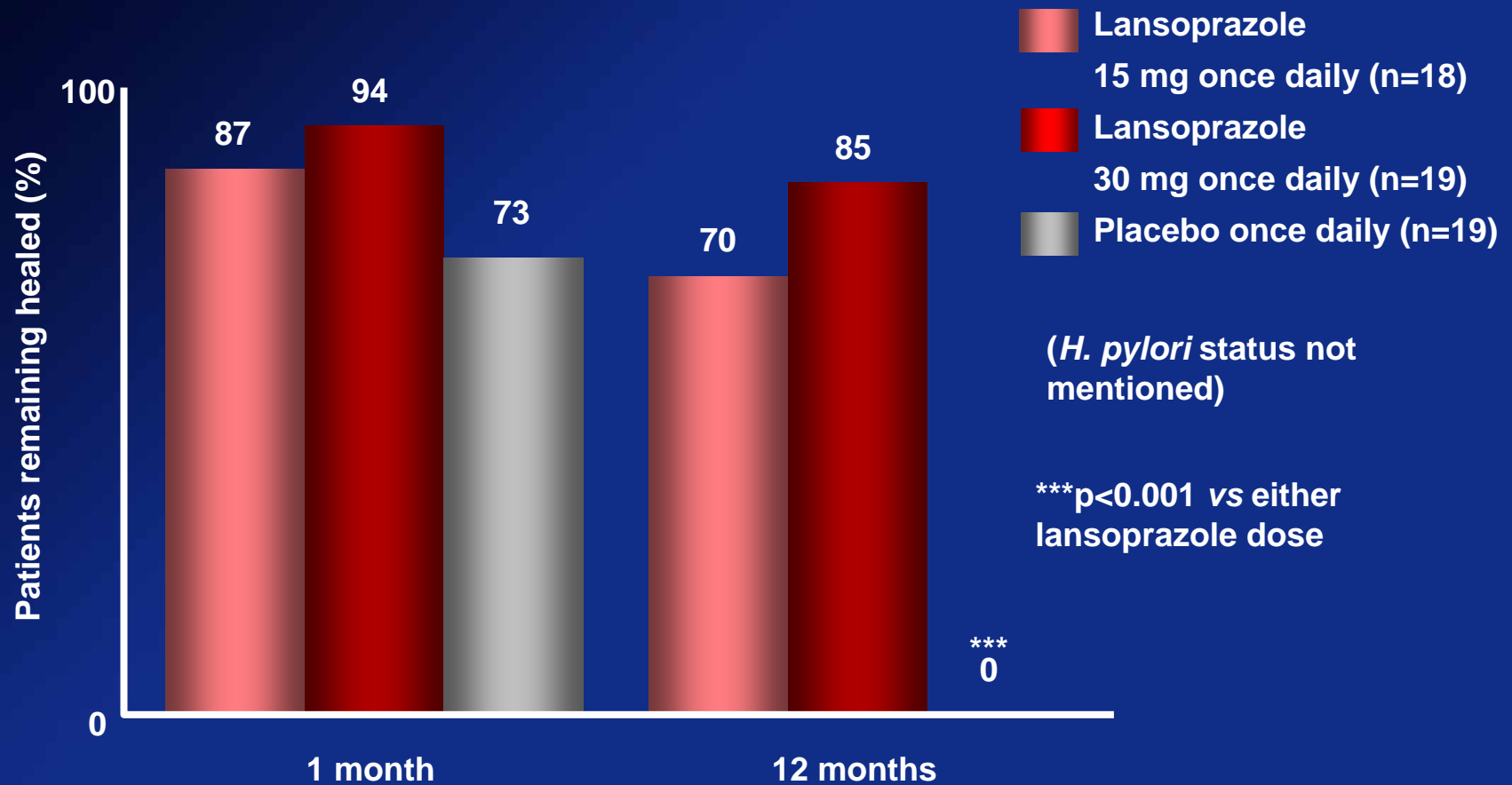
# 成功根除幽門螺桿菌對治癒潰瘍的影響

Review of 60 trials; 4329 patients


Ulcer healing rate according to post-treatment *H. pylori* status



# 以Lansoprazole作為十二指腸潰瘍的維持治療



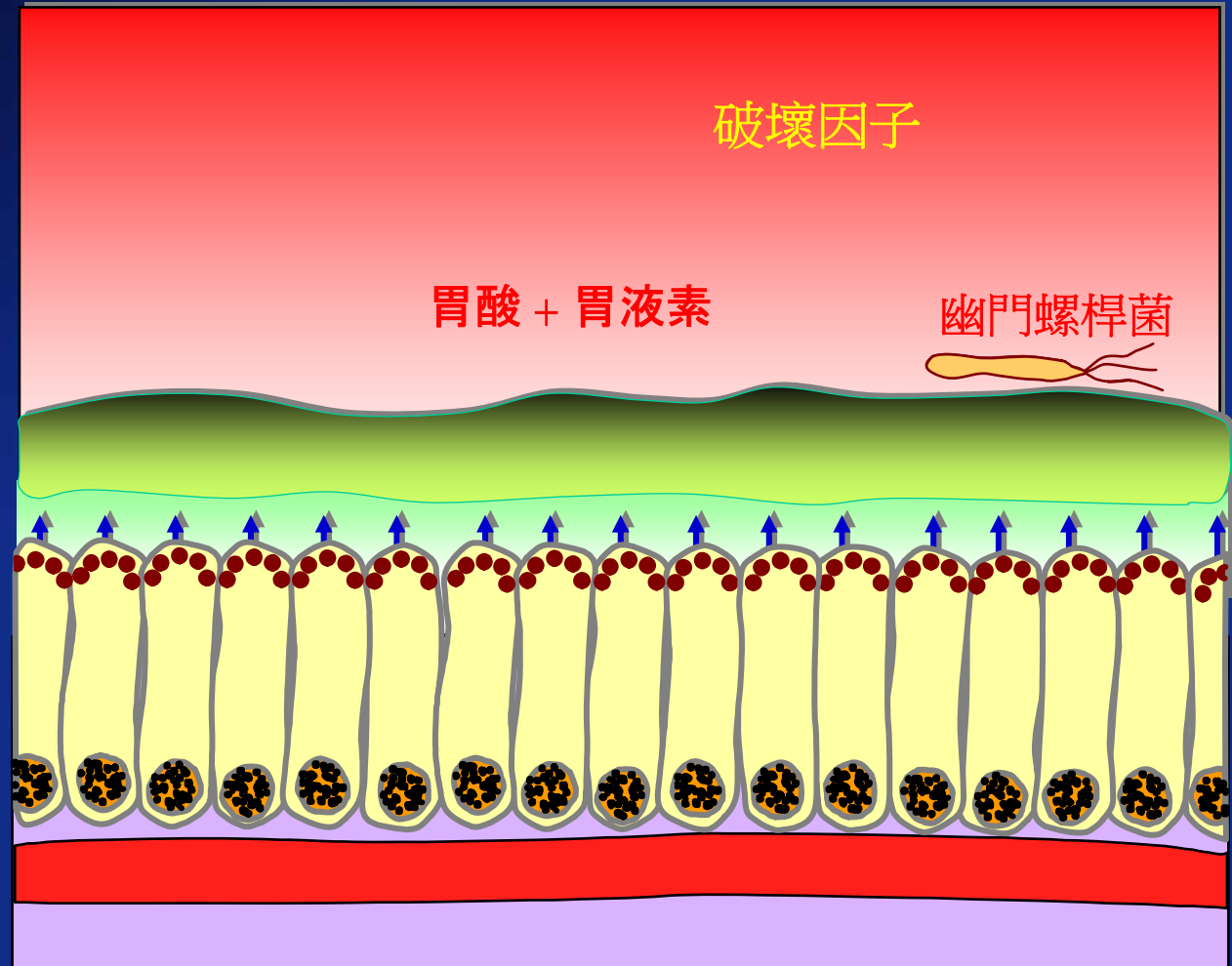




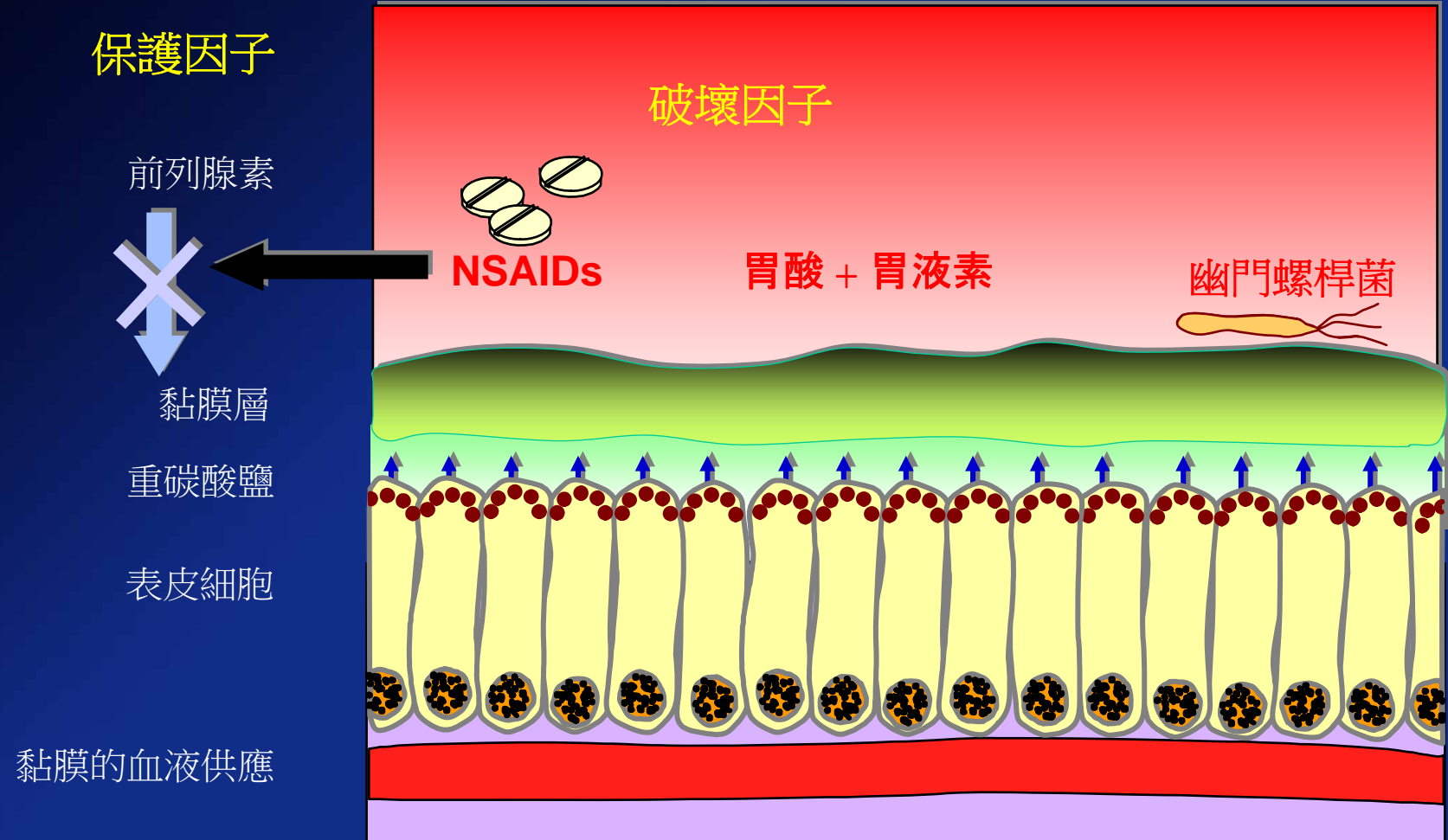
# 非類固醇類抗炎藥物 (NSAID)所引致的潰瘍

# (NSAID)所引致的潰瘍的發病原理

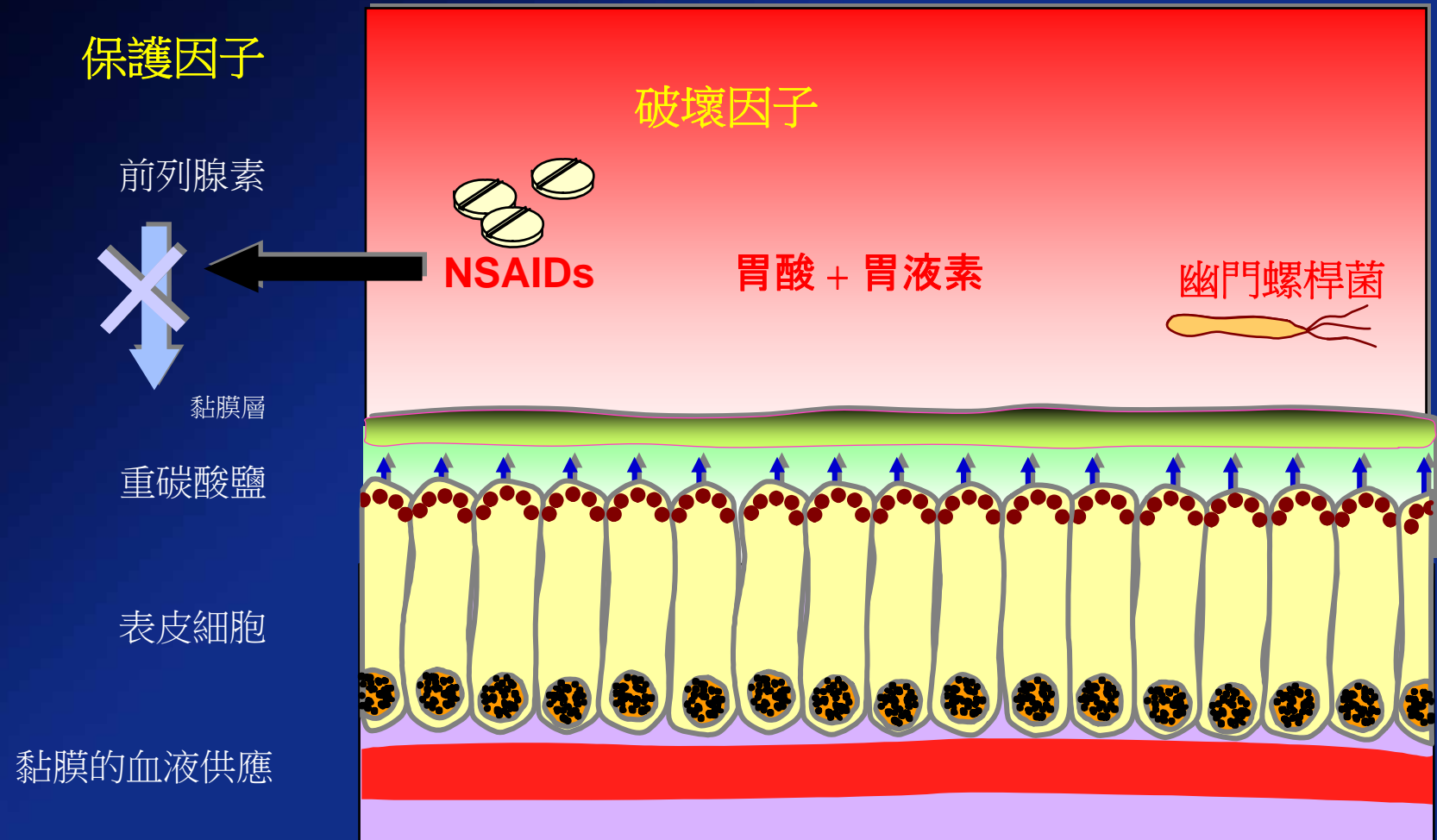
保護因子  
↓  
前列腺素  
↓  
黏膜層  
重碳酸鹽  
表皮細胞  
↓  
黏膜的血液供應



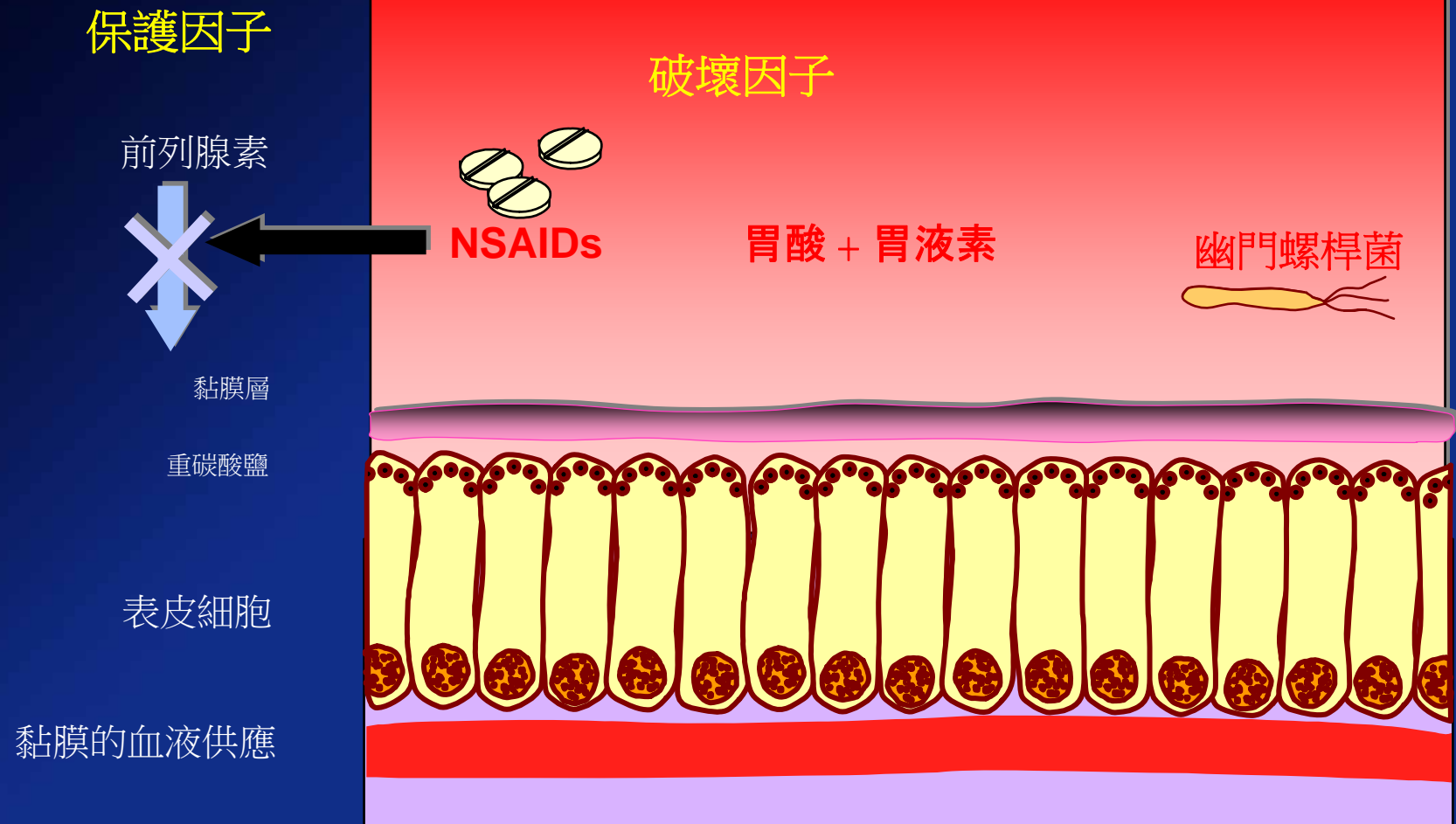
# (NSAID)所引致的潰瘍的發病原理



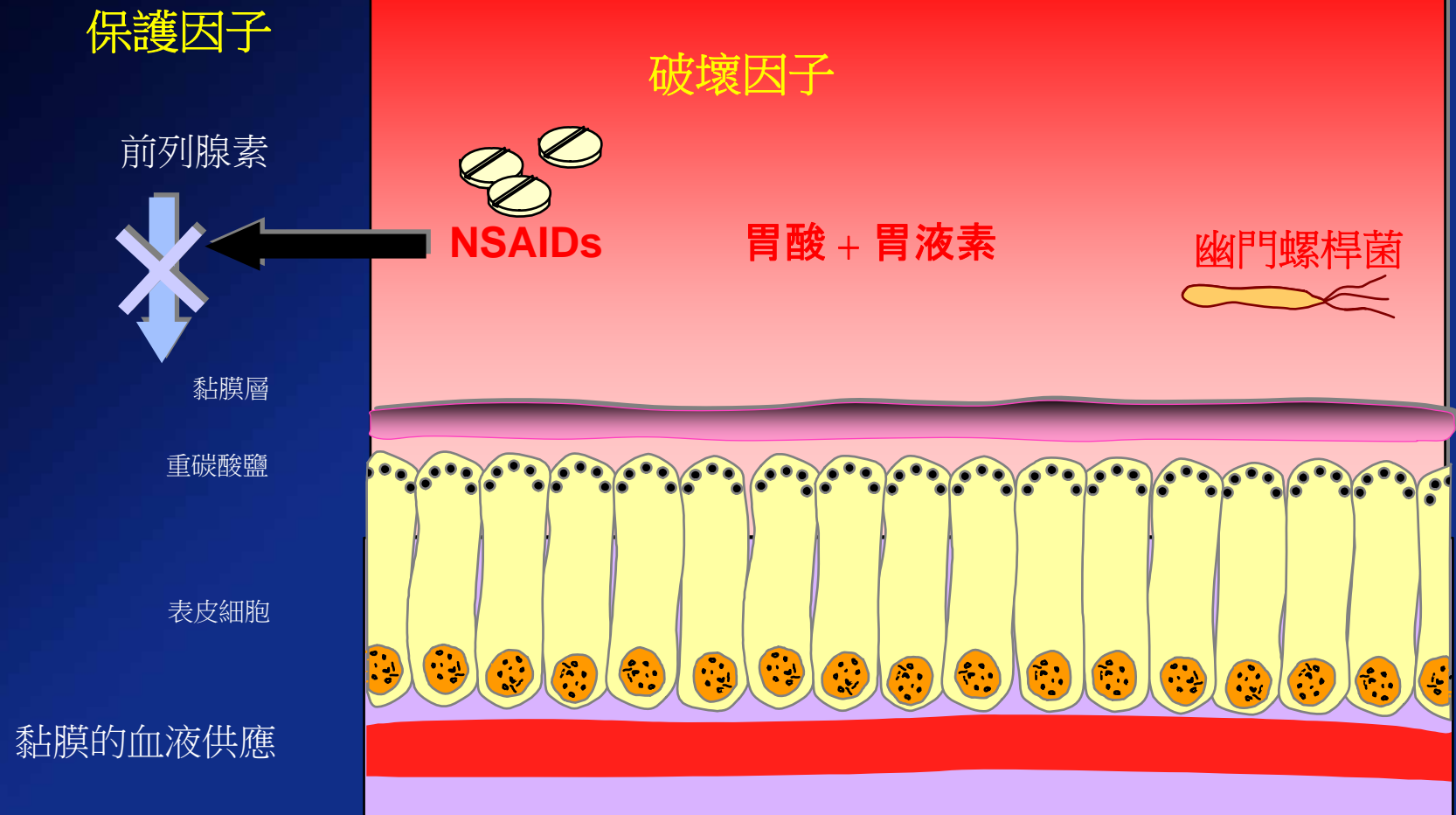
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# (NSAID)所引致的潰瘍的發病原理

保護因子

前列腺素



黏膜層

重碳酸鹽

表皮細胞

黏膜的血液供應

破壞因子

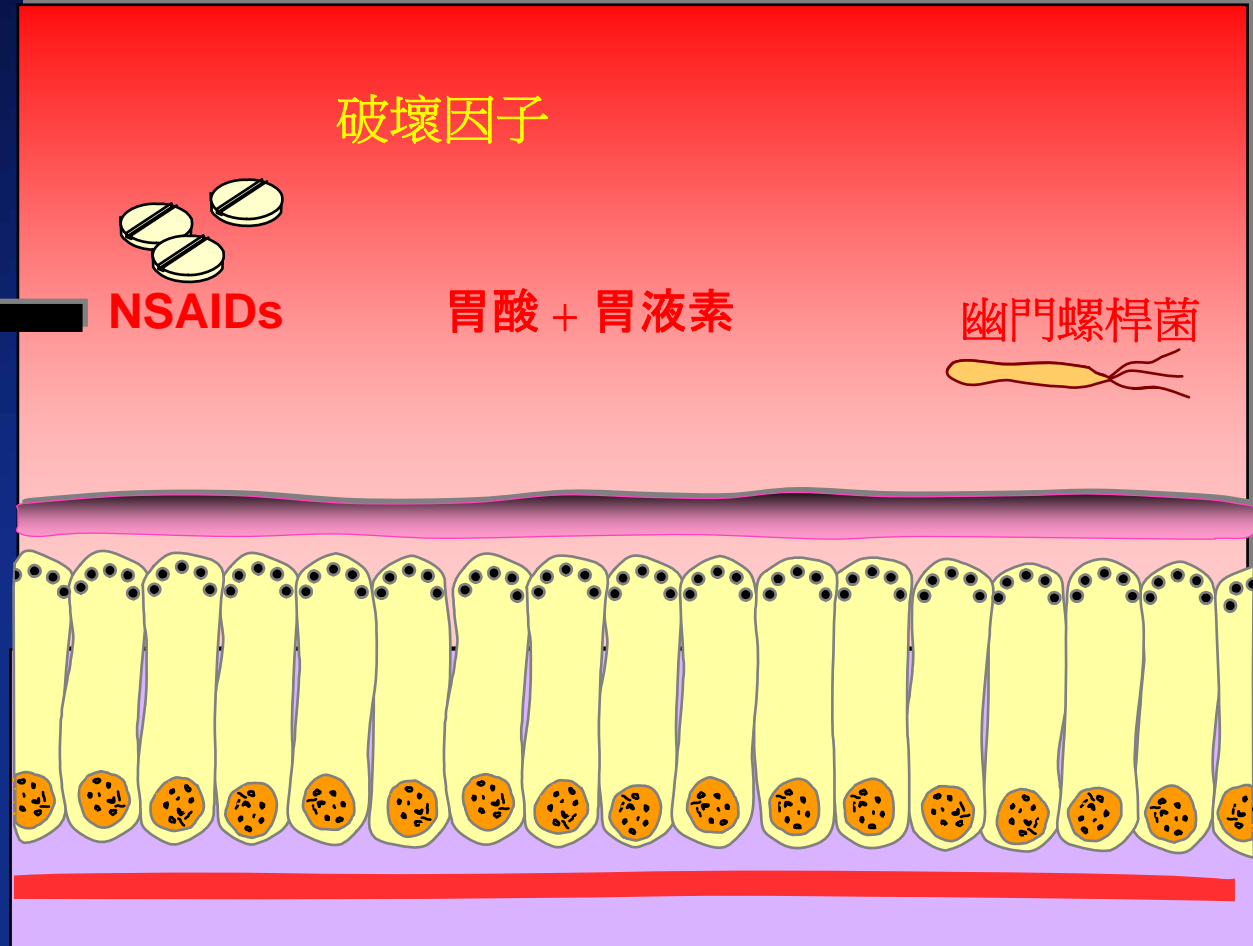


NSAIDs

胃酸 + 胃液素



幽門螺桿菌



# (NSAID)所引致的潰瘍的發病原理

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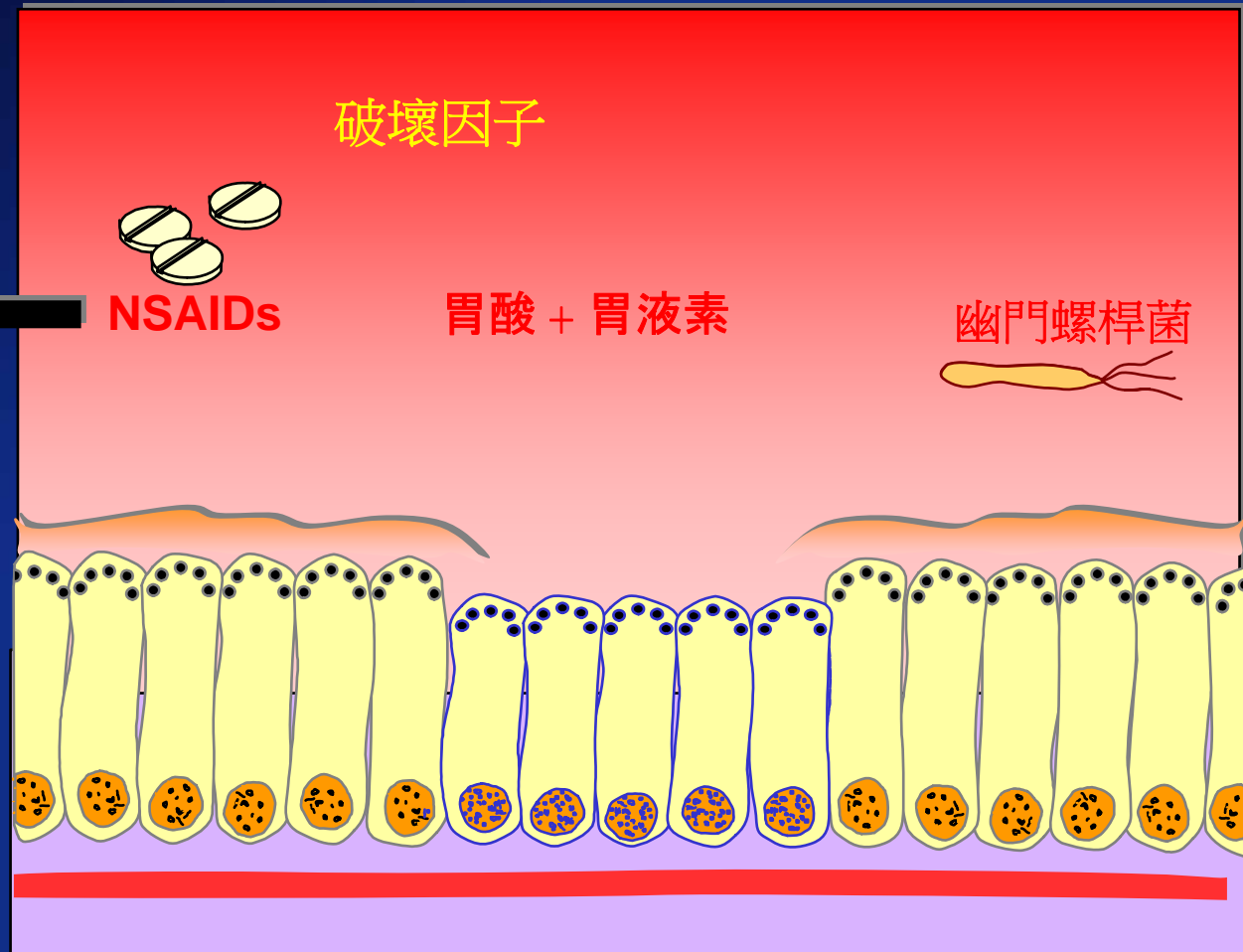
破壞因子



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# (NSAID)所引致的潰瘍的發病原理

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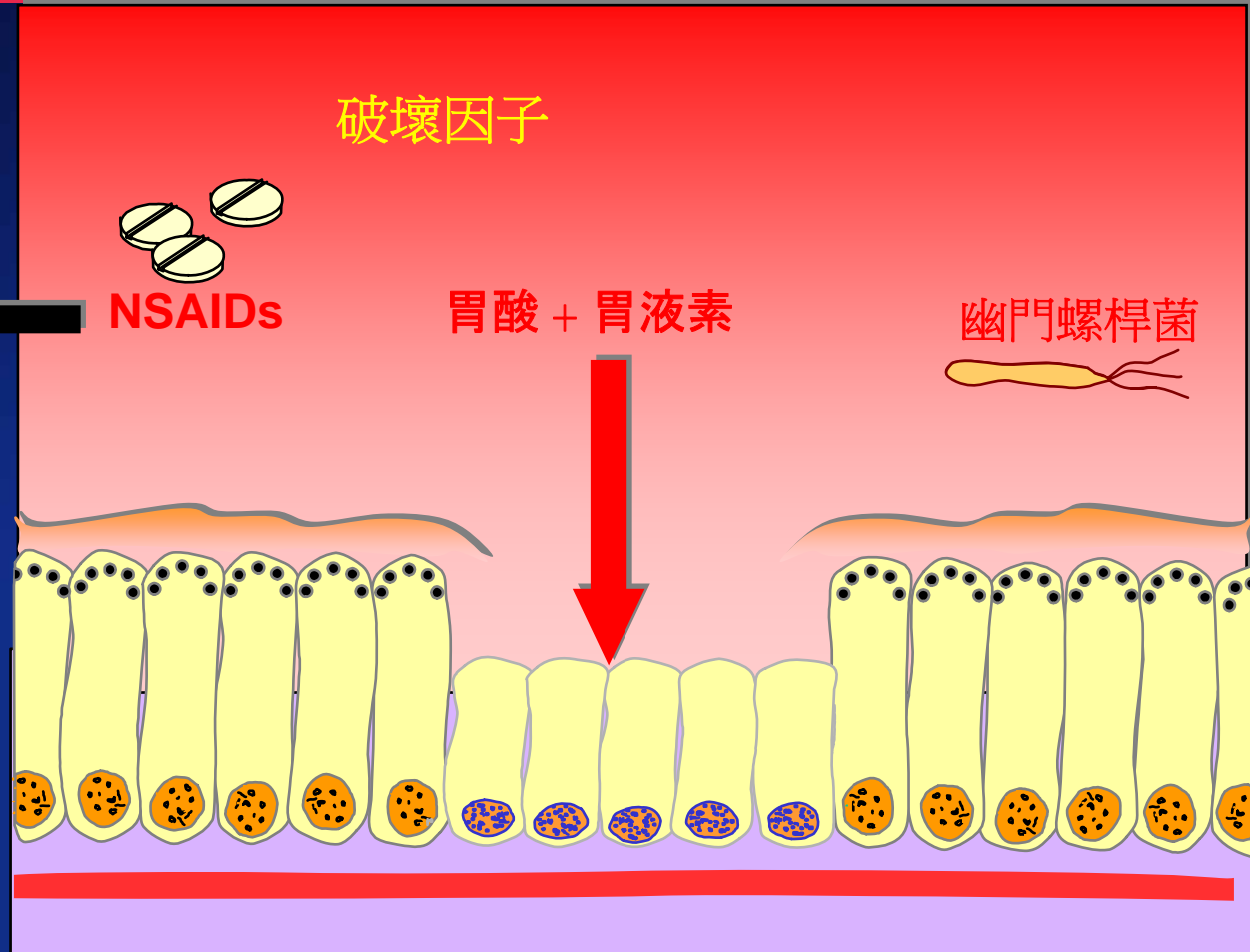
破壞因子



NSAIDs

胃酸 + 胃液素

幽門螺桿菌



# (NSAID)所引致的潰瘍的管理

- 停止使用NSAIDs或用毒性較低的藥物代替
  - 低毒性的NSAIDs 或 COX-2抑制劑
- 抑制胃酸分泌
  - 正常劑量的質子泵抑制劑治療
  - 高劑量的組胺H<sub>2</sub>受體阻斷劑治療
- 使用黏膜保護劑
  - Misoprostol (多副作用, 導致流產)

Seager & Hawkey, *BMJ* 2001; **323**: 1236–9.  
Silverstein *et al.*, *Ann Intern Med* 1995; **123**: 241–9.  
Graham *et al.*, *Ann Intern Med* 1993; **119**: 257–62.  
Yeomans *et al.*, *N Engl J Med* 1998; **338**: 719–26.

# NSAID所引致胃潰瘍 – 抑制胃酸分泌

## ● 抗酸藥

- 療效有限，特別是預防胃潰瘍

## ● 組胺H<sub>2</sub>受體阻斷劑

- 有效預防胃潰瘍;與某些藥物有相互作用，安全(良好的耐受性)

## ● 質子泵抑制劑

- 較組胺H<sub>2</sub>受體阻斷劑有效治癒 **NSAID**引致的潰瘍，安全(良好的耐受性)

# 胃潰瘍治療: 總結

- 受幽門螺桿菌感染的病人必需根除此病菌
- 應停止使用**NSAIDs**或減少使用(如可能)
- 質子泵抑制劑是最有效抑制胃酸的藥物，亦是治療胃潰瘍最恰當的第一線療法

Soll, *JAMA* 1996; **275**: 622–9.

Malfertheiner *et al.*, *Aliment Pharmacol Ther* 2002; **16**: 167–80.



● 肥胖症可能導致

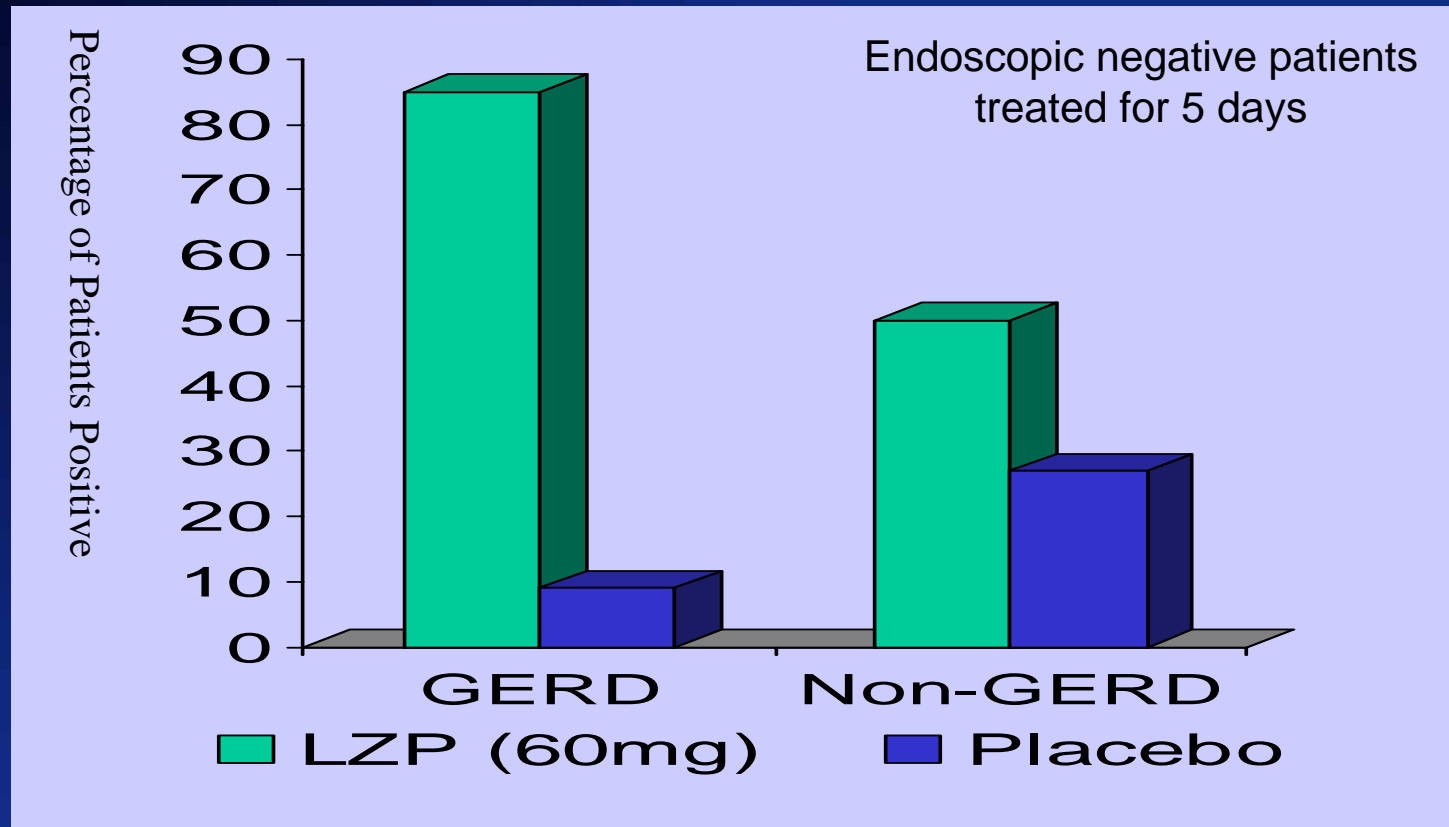
- 炎症

- 胰島素抗性

- 非酒精引起的脂肪肝 (NAFLD)

*McCullough, 2002, AASLD*

# 用質子泵抑制劑 作為診斷胃酸倒流的工具



# 胃酸倒流的呼吸系統及食道併發症

## Asthmatic patients with GORD (n=118)

