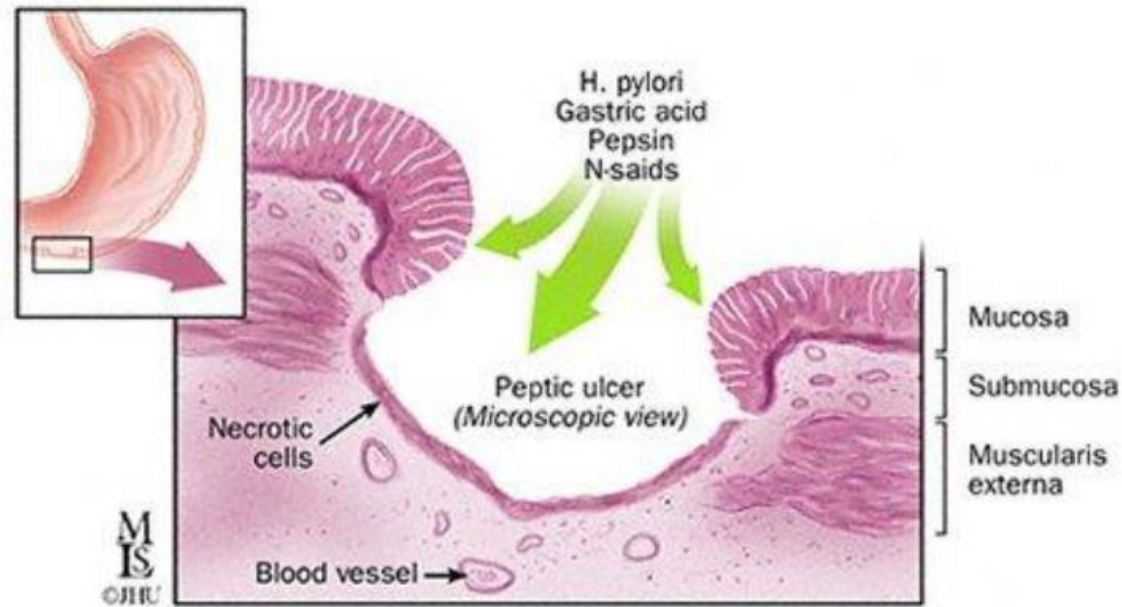
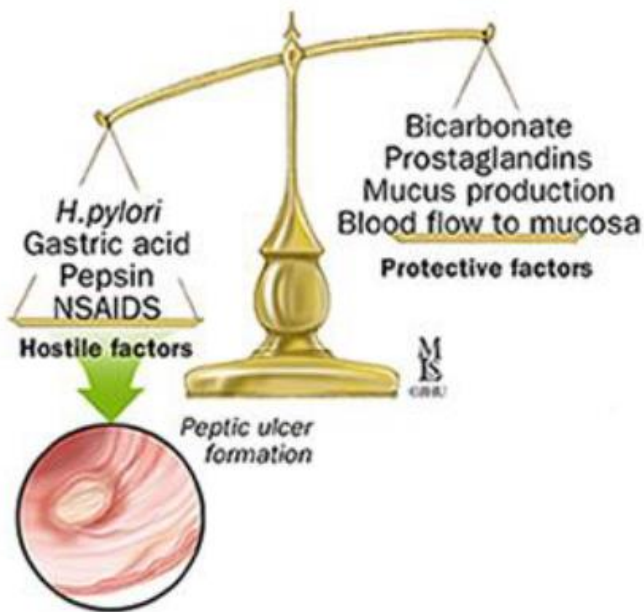


Diagnosis of Peptic Ulcer

2017.12.26
IM R3 고명지

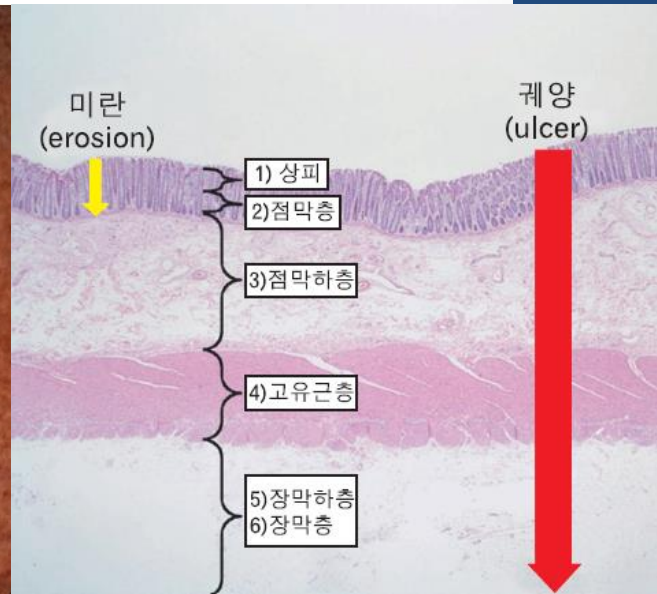
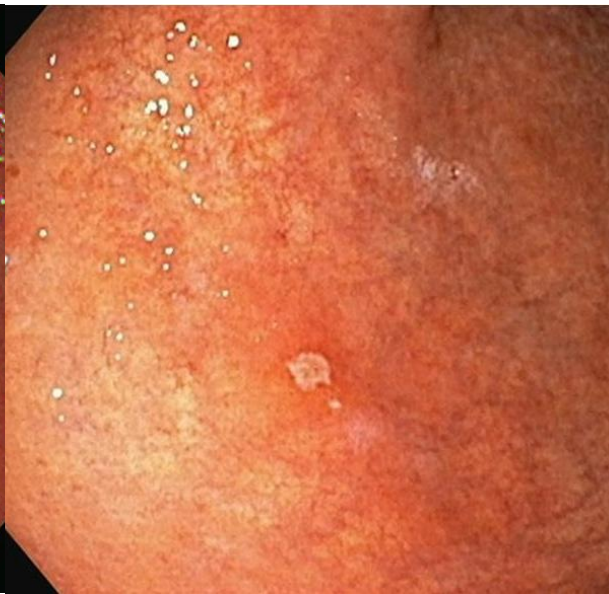
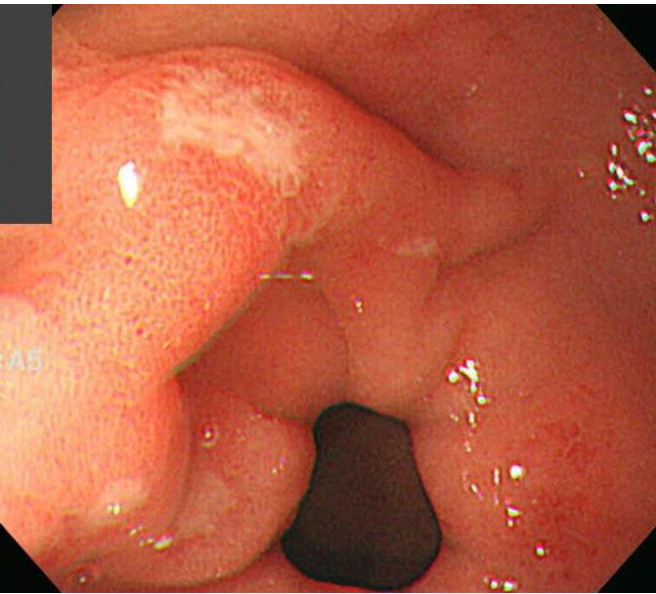
Definition of Peptic Ulcer

- 공격인자와 방어인자의 불균형으로 인해 위장관 점막의 결손이 발생하는 것



Definition of Peptic Ulcer

- 조직학적
 - Ulcer(궤양)
 - 괴사된 점막의 결손이 점막하층 이하까지 발생하는 경우
 - Erosion(미란)
 - 점막층만으로 결손이 국한된 경우



Cause of Peptic Ulcer

- Helicobacter pylori (m/c)
 - NSAID
 - Zollinger-Ellison syndrome
 - Stress induced ulcer
-
- Infection
 - Drug (bisphosphonates, chemotherapy, clopidogrel, Glucocorticoids when combined with NSAID, mycophenolate)
 - Radiation therapy
 - Crohn's disease

Peptic ulcer

	DUODENAL	GASTRIC
INCIDENCE	More common	Less common
AGE	common in middle age 30-50years	Common in late middle age
Gender	M:F = 4:1	M:F = 2:1
ANATOMY	First part of duodenum – anterior wall	Lesser curvature of stomach
DURATION	Acute or chronic	Chronic
CAUSE	More related H.pylori (up to 95%)	Less related to H. pylori(80%) Use of NSAID : 3-4 fold increase in risk
MALIGNANCY	Rare	Benign or malignant

Clinical presentation

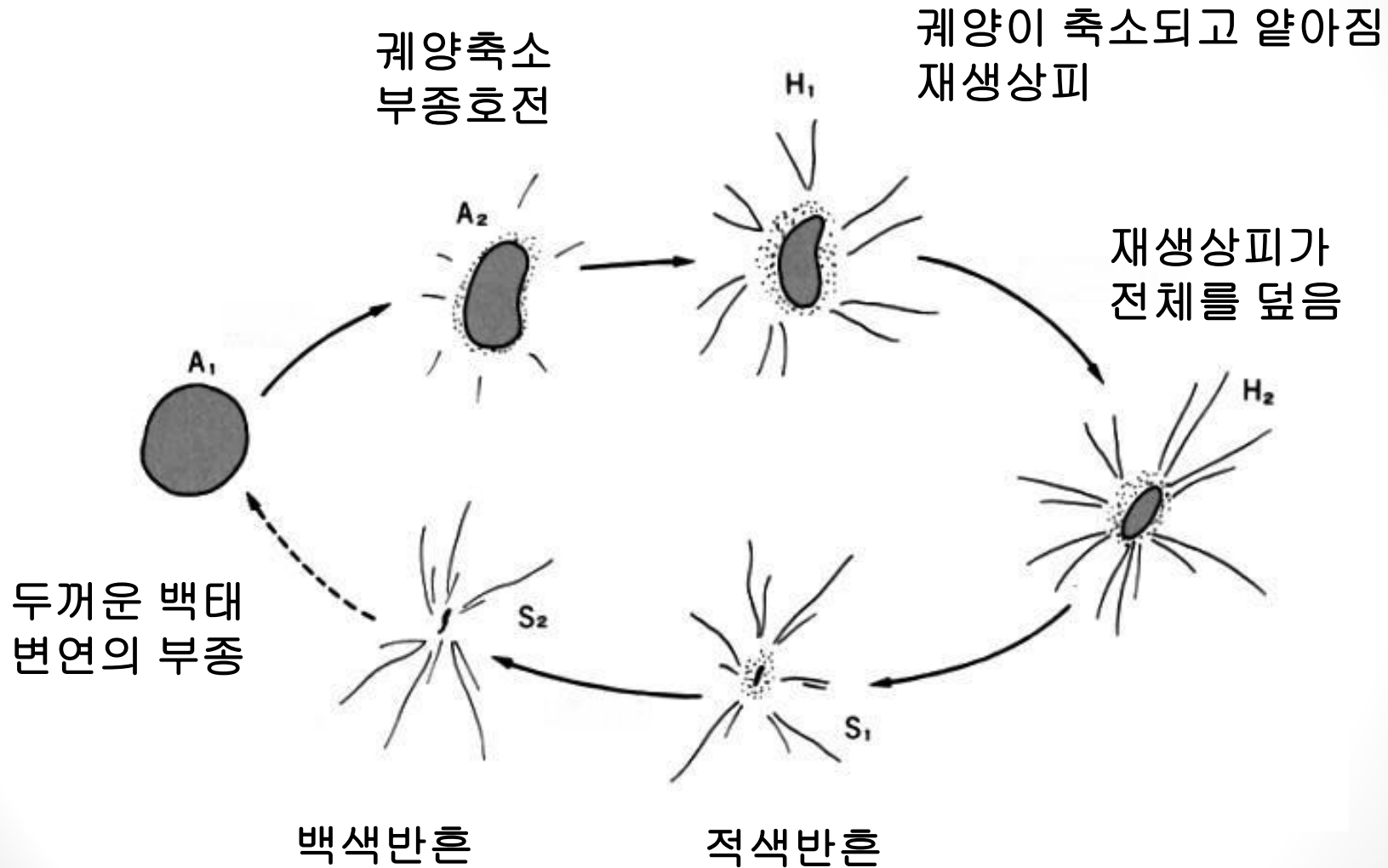
- limited predictive value because they are non-specific.

	Duodenal ulcer	Gastric ulcer
Epigastric pain	90 min to 3 h after a meal (hunger pain)	precipitated by food
	70% awakes the patient from sleep (between midnight and 3 A.M.)	Nausea and weight loss occur more common
	frequently relieved by antacids or food	

Diagnosis

- Endoscopy
 - 궤양의 위치, 개수, 크기, 형태, Margin, Edge, 바닥, Fold, 자연 출혈의 유무 등 기술
 - 위궤양의 경우 악성과의 감별 위해 반드시 조직검사 시행
 - 궤양의 변연을 따라, 4개 이상 권고
 - H.pylori 진단을 위한 조직검사
 - 위음성 가능성을 줄이기 위해 전정부와 위체부에서 동시에 조직을 채취하여 검사

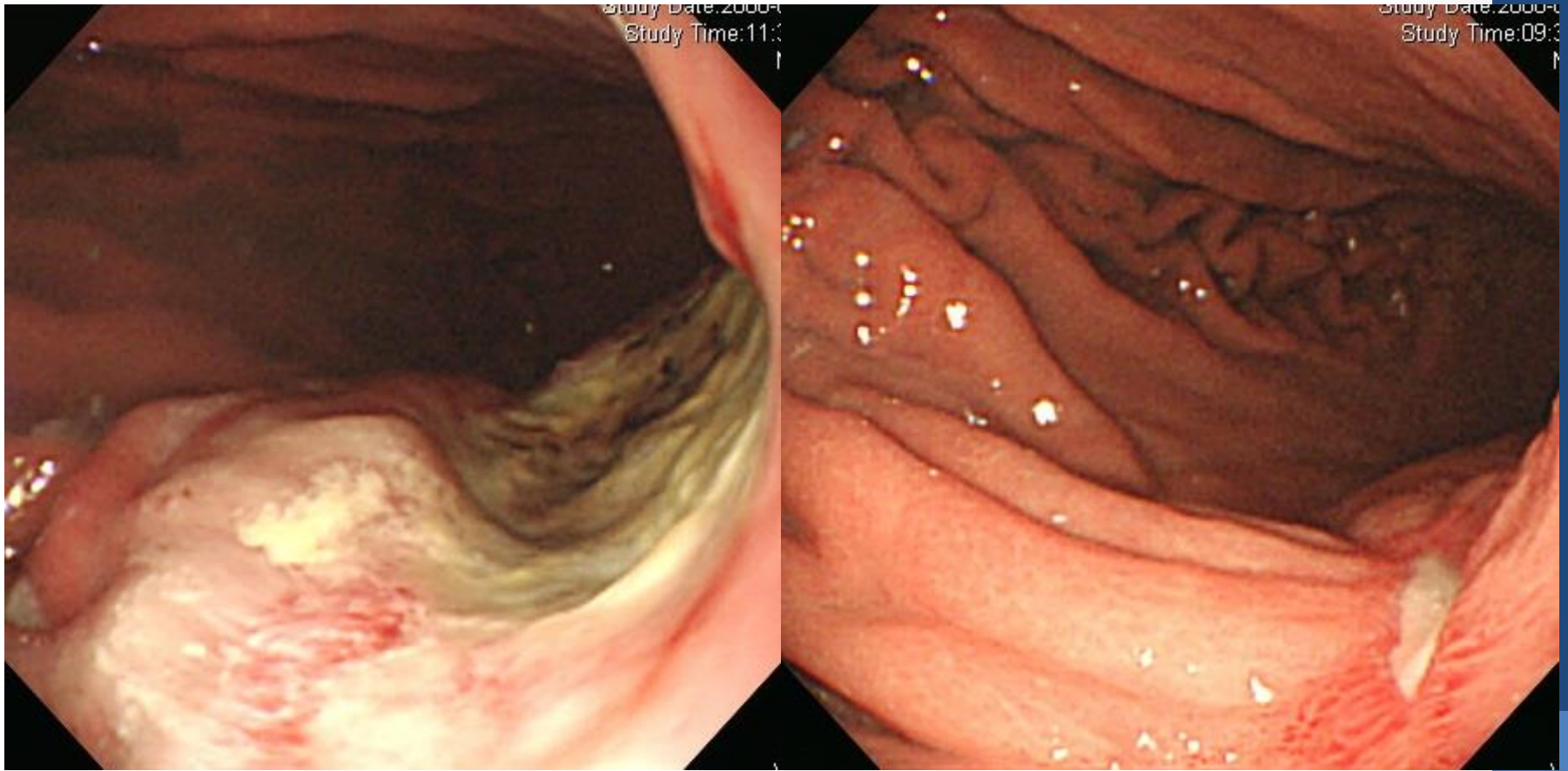
Stage of BGU – Stage system of Sakita



Active Stage

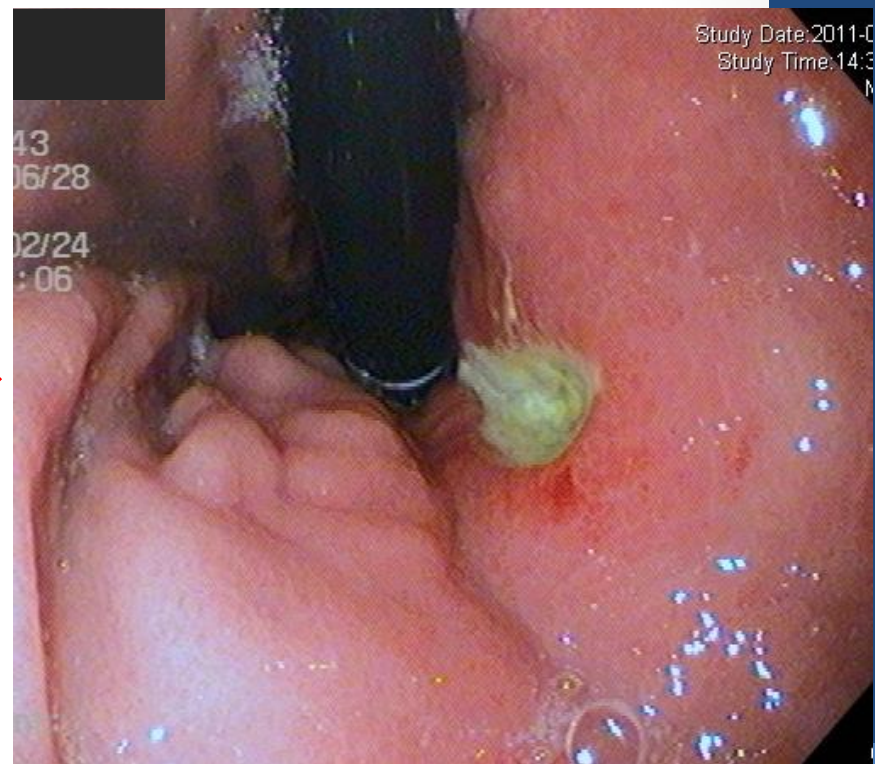
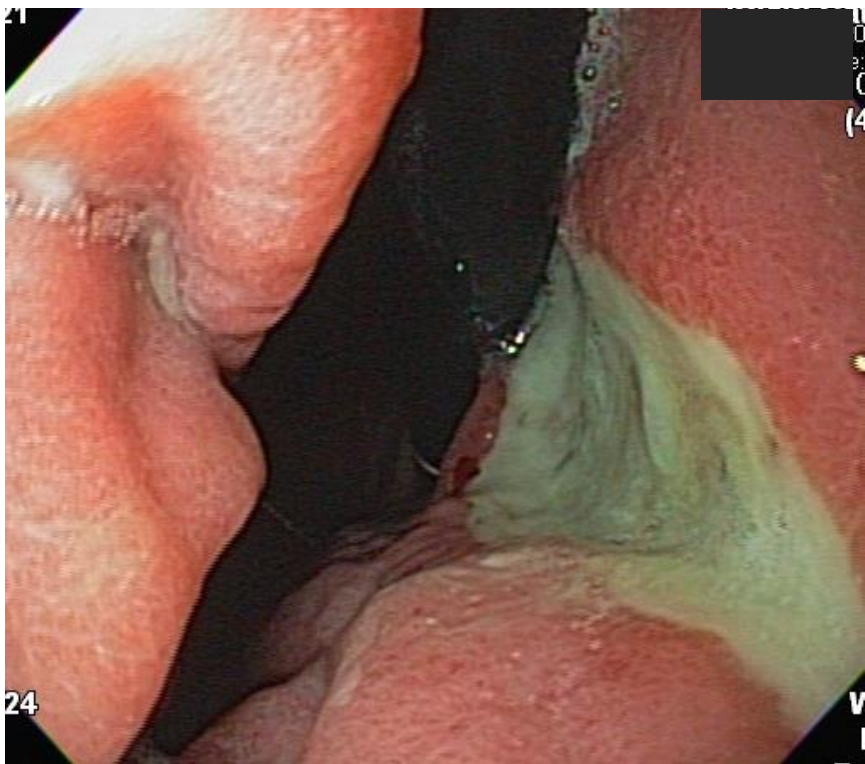
- **Active stage 1**
 - Whitish coating of the base of ulcer
 - Edematous, smooth margins develops surrounding the ulcer base
 - Covered with an adherent clot or stained with dark spots reminiscent of old bleeding
 - No regenerating epithelium nor converging folds
- **Active stage 2**
 - Ulcer margin is clear and edematous rims decreased
 - Gradually regenerating epithelium and converging fold is seen

BGU, A1



- 두꺼운백태, 깊은 궤양저, 불규칙한 변연, 출혈의 흔적

BGU, A1



BGU, A2



- 변연의 염증 감소, 형태 선명, 궤양저 깨끗

BGU, A2



8 weeks later

BGU, A2



2003. 7. 1.

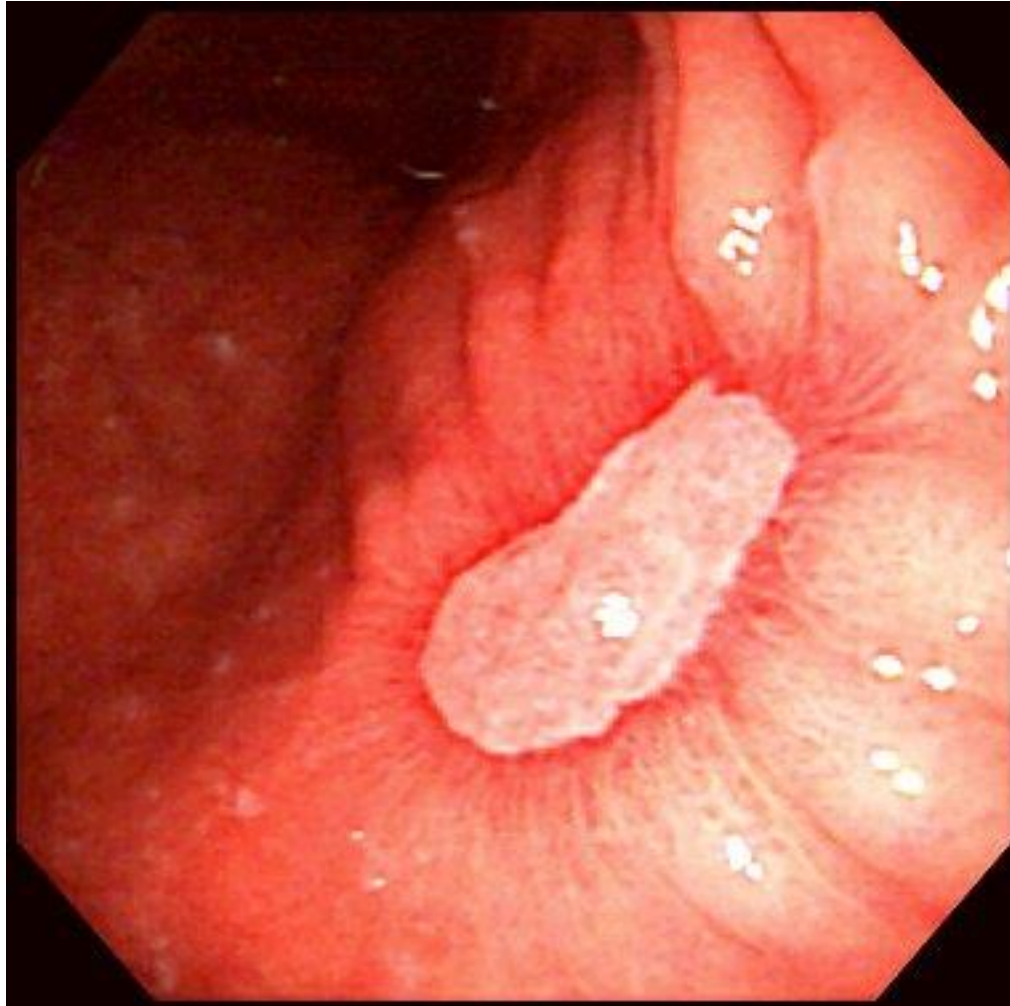


2003. 8. 1.

Healing Stage

- **Healing stage 1**
 - Whitish coating base of the ulcer becomes smaller and thinner
 - **Regenerating epithelium** is seen to extend into the ulcer base
 - Ulcer base shrinks in a concentric fashion
- **Healing stage 2**
 - Ulcer base loses its punched-out appearance and becomes irregular and less well defined
 - Erythematous margins slightly nodular
 - **Gradually regenerating epithelium almost completely covers the ulcer floor and whitish base shrinks further**

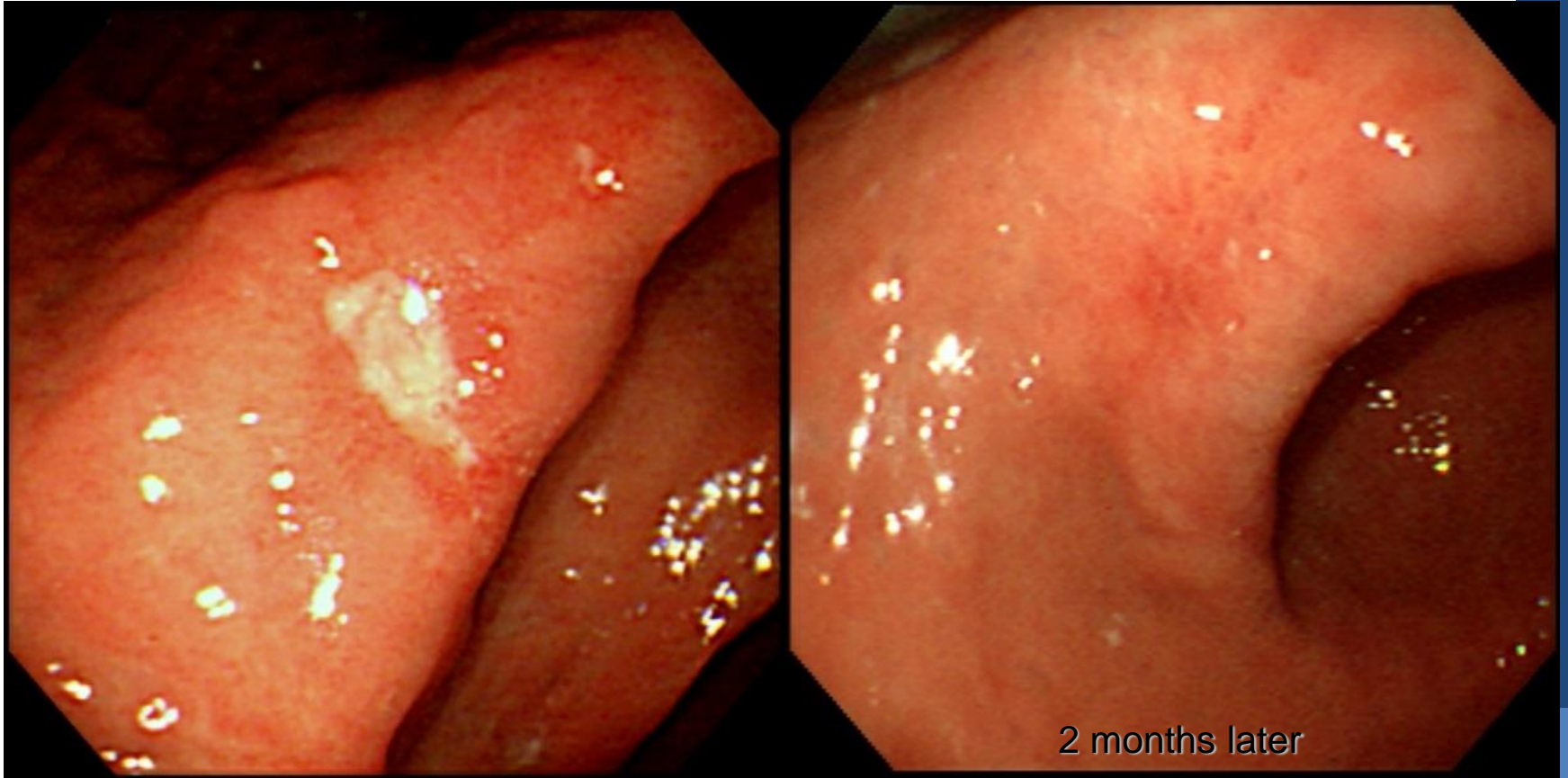
Regenerating Epithelium



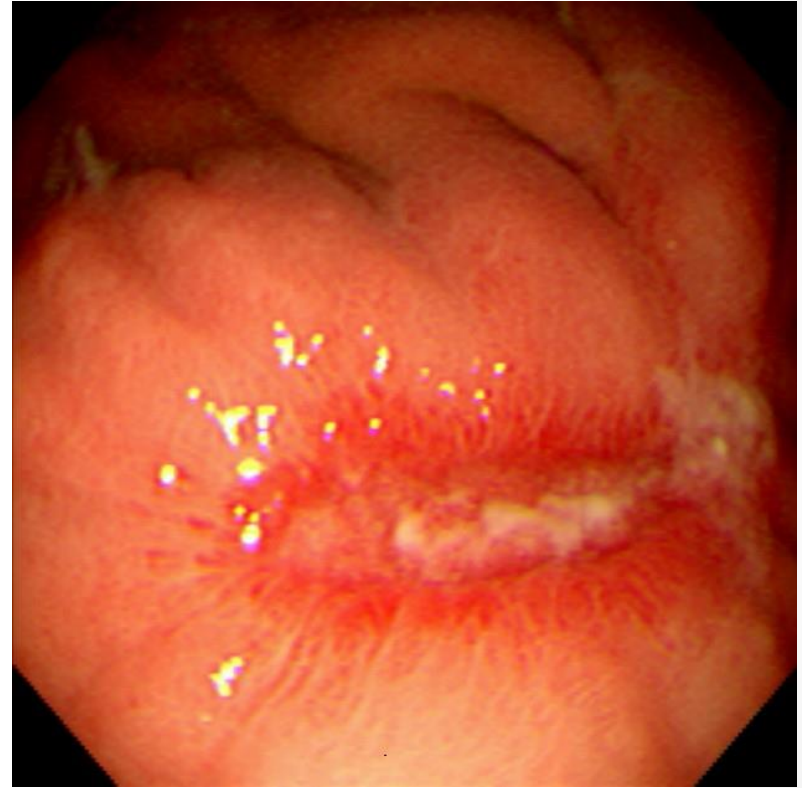
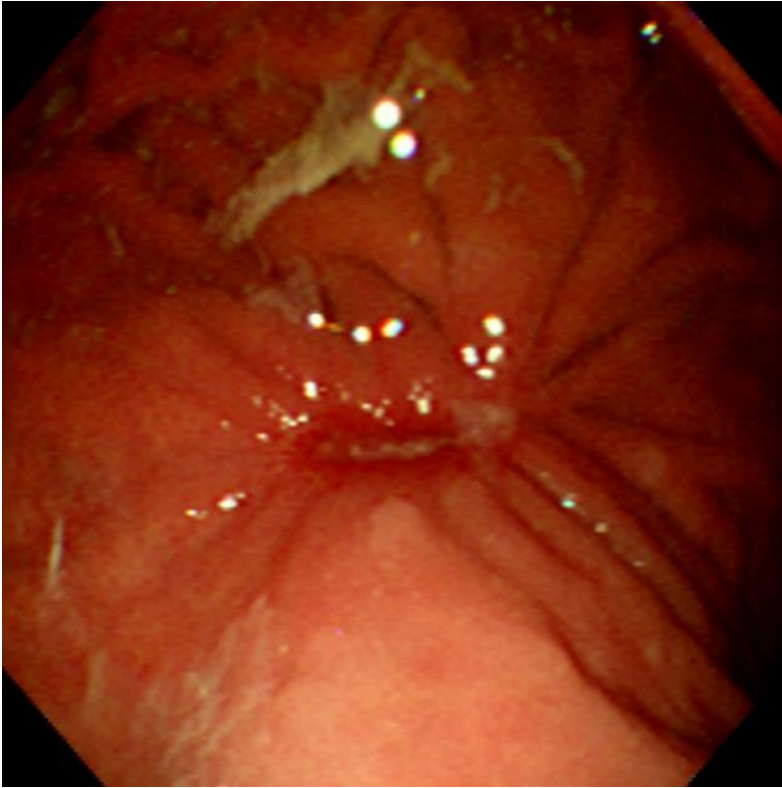
BGU H1



BGU H1



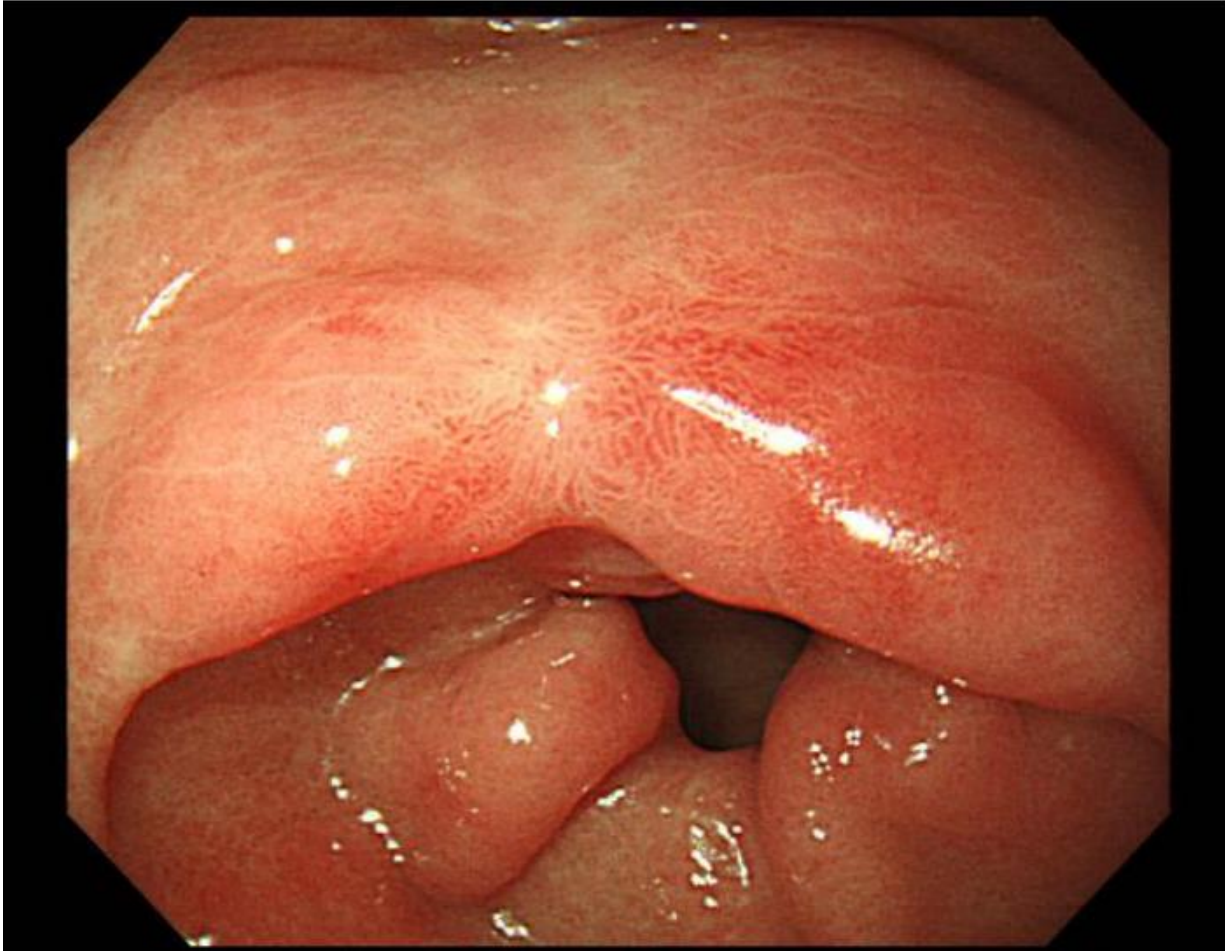
BGU H2



Scar Stage

- Regenerating epithelium completely covers the floor of the ulcer, replacing the white coating
- Scar stage 1 = Red scar stage
- Scar stage 2 = White scar stage
 - mature epithelium becomes indistinguishable from the surrounding mucosa

Scar Stage, S1



Scar Stage, S2



Ulcer vs. Malignancy

Table 1. 양성궤양과 진행위암의 비교

	양성궤양	진행위암
궤양바닥	백태는 균일 평탄	백태는 불균일, 요철, 일부 궤양 바닥이 노출 응혈, 괴사물의 부착
가장자리	비교적 완만 백태가 삐어져 나오는 경우가 적다	불규칙, 두드러짐 백태가 삐어져 나오는 경우가 많다
주위점막	염증침윤이 있으나 단단하지 않다 균일한 발적 주변 융기의 높이는 낮고 비교적 완만하며 균일하다	암침윤에 의한 융기로 단단하다 발적이 균일하지 않다 주변 융기의 높이는 높고 요철 모양으로 균일하지 못 하다

Ulcer vs. Malignancy

Table 2. 양성궤양과 조기위암의 비교

	양성궤양	조기위암
궤양바닥	백태가 균일하게 바닥을 덮는다	백태가 균일하지 않다 요철모양 섬모양의 점막 노출이 보인다
가장자리	평활하고 선명하다	부정형 백태가 빠져 나오기도 한다
재생상피모양	규칙적인 모양 완만	불규칙한 요철, 퇴색 주위 점막과의 사이에 높이 차이가 있고 경계가 일정치 않은 벌레 먹은 모양
집중주름	궤양 가장자리까지 완만	가늘어지거나 절단, 융합, 비대

Ulcer vs. Malignancy

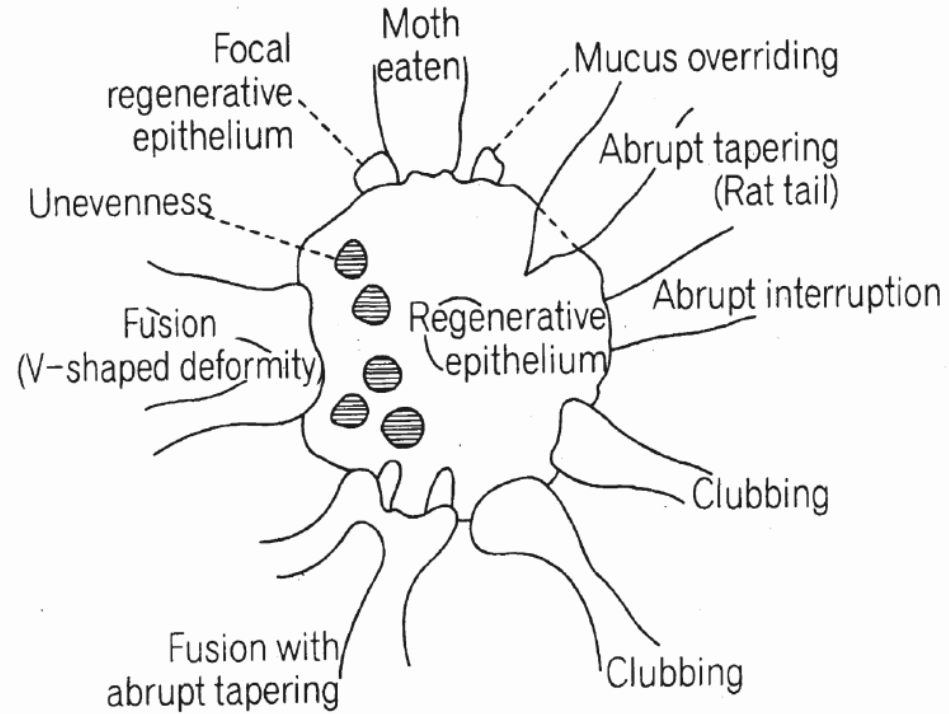
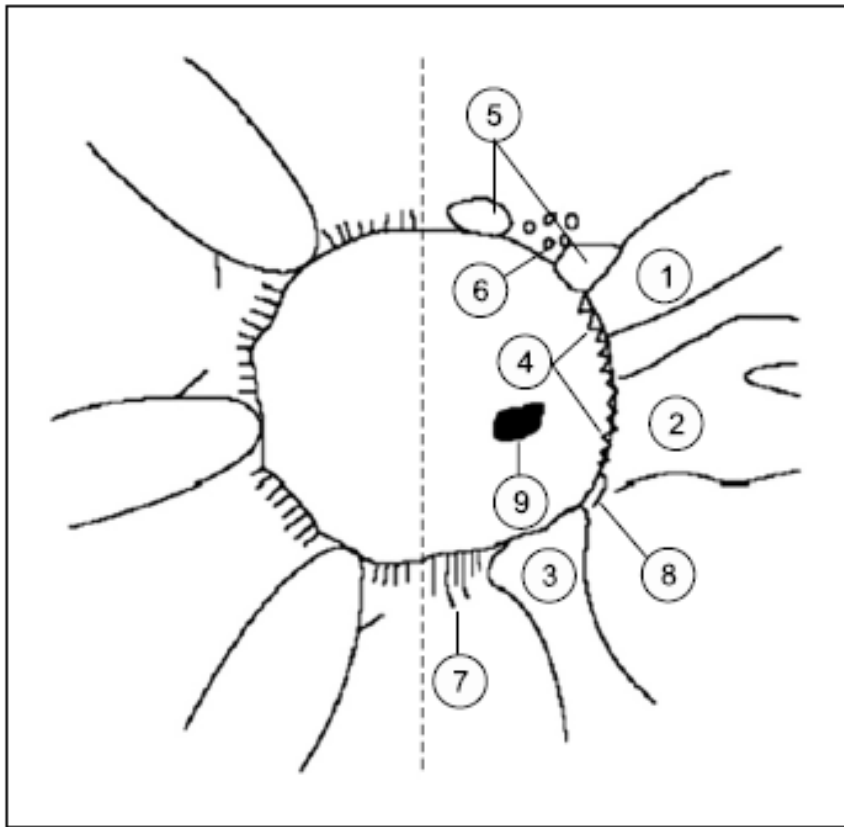
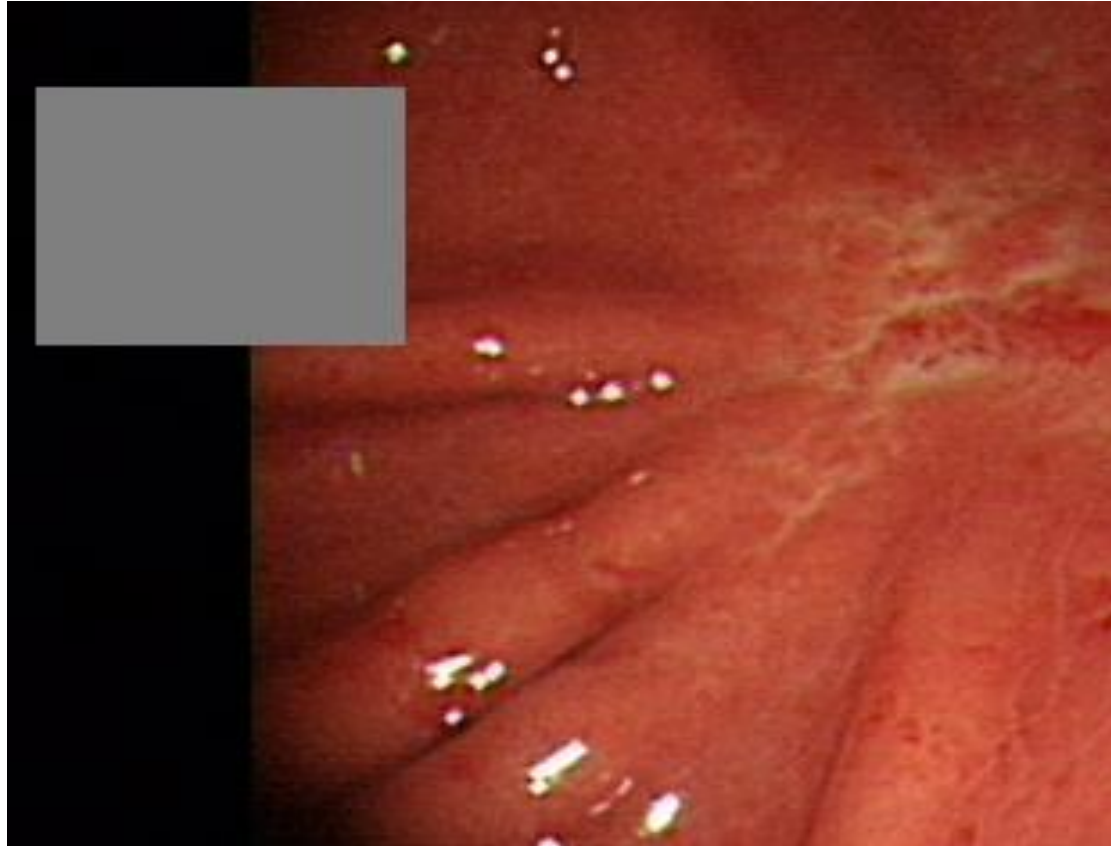
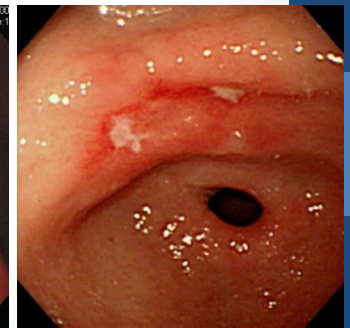
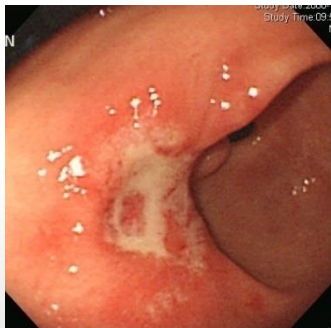
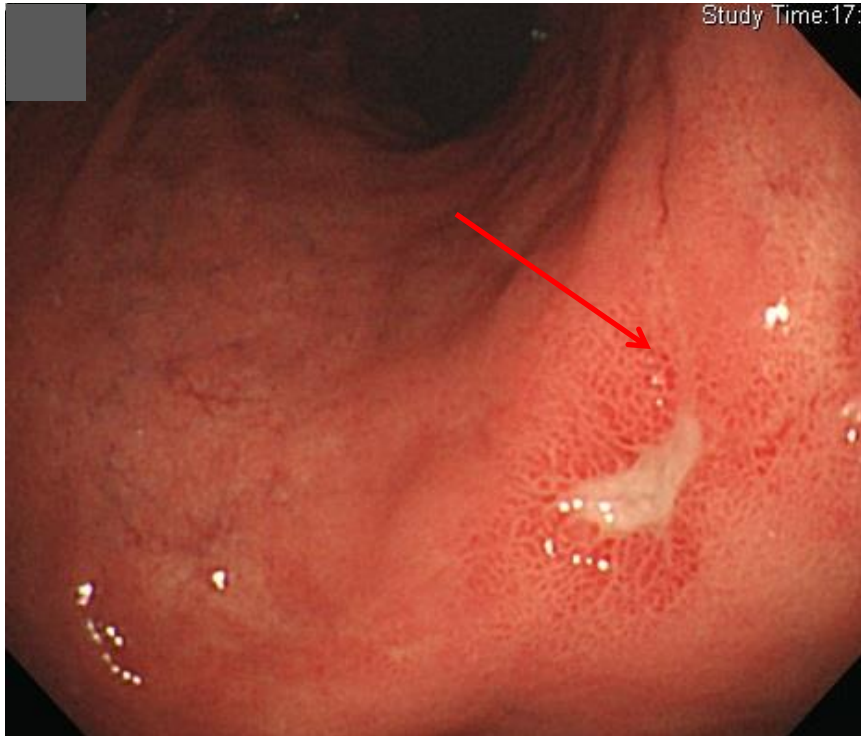
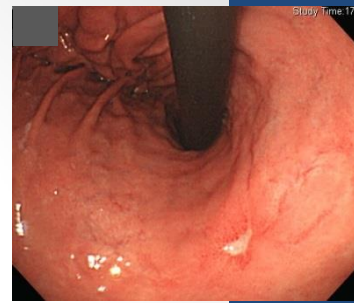


Figure 1. 조기위암과의 감별점. ① 중도절단 ② 융합 ③ 곤봉 모양 비대 ④ 벌레먹은 모양(부정형) ⑤ 요철, 소결절 ⑥ 불규칙 발적, 퇴색 ⑦ 부분적인 재생상피 ⑧ 불규칙한 백태 ⑨ 섬모 양의 재생상피.

Ulcer vs. Malignancy



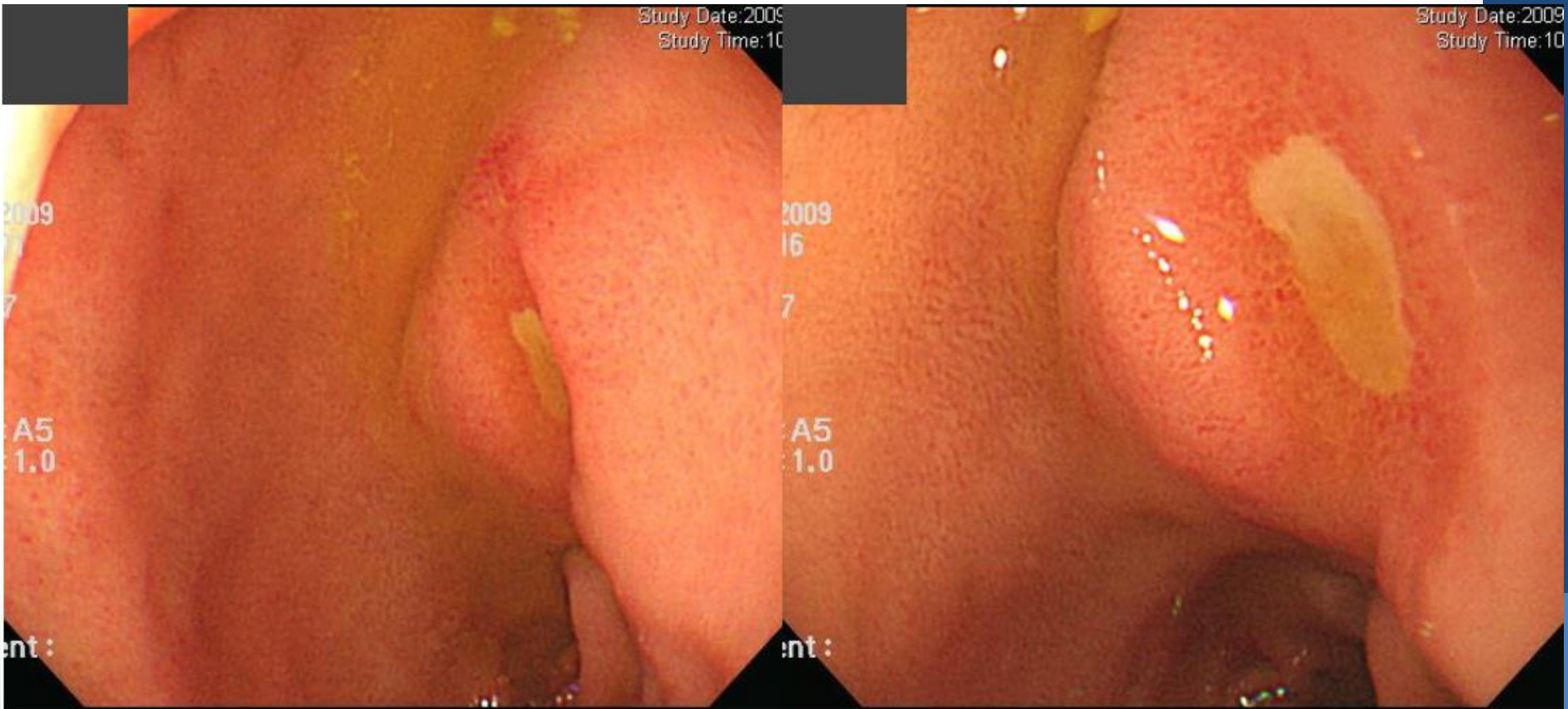
Ulcer vs. Malignancy



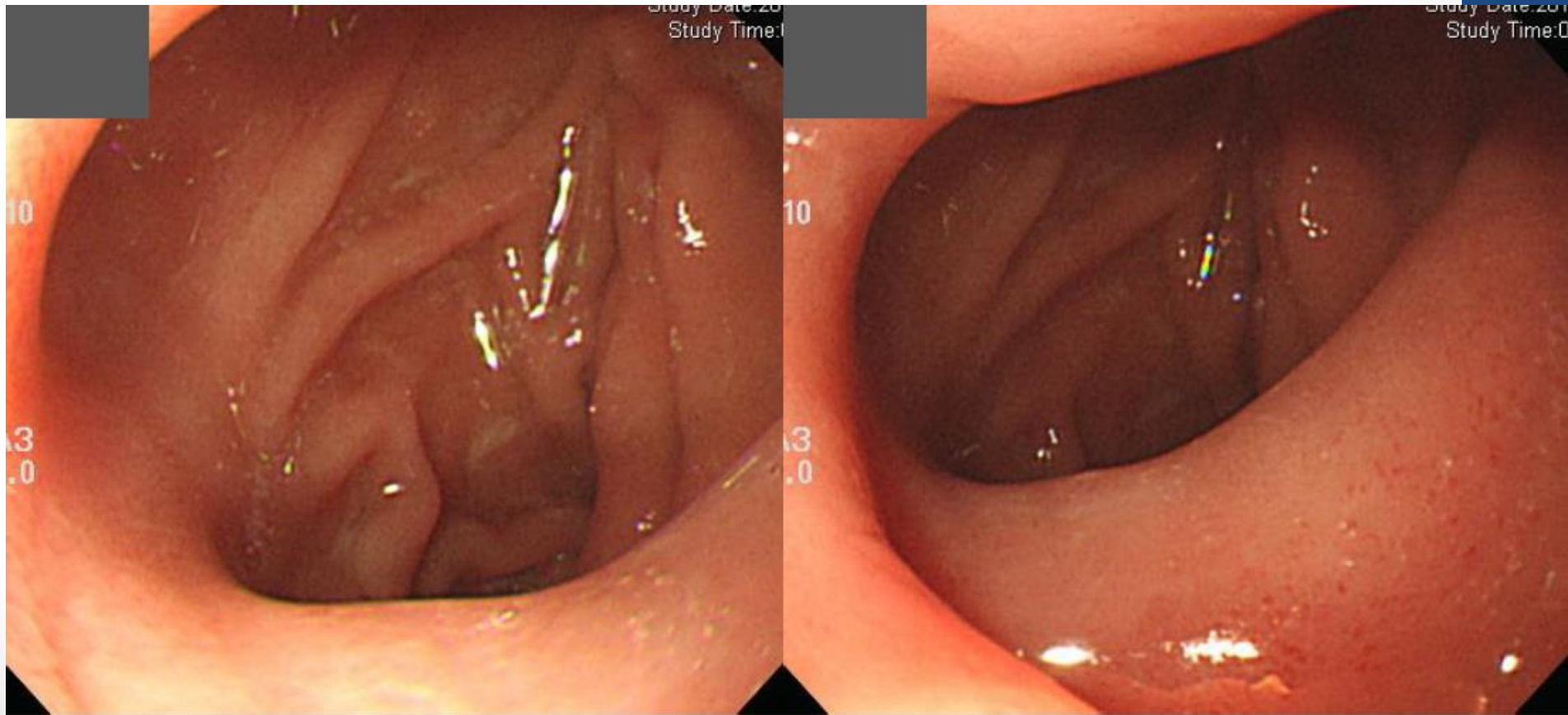
Duodenal ulcer –Active stage



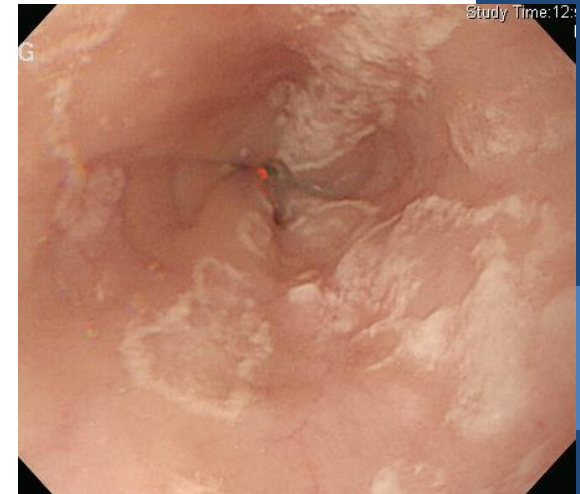
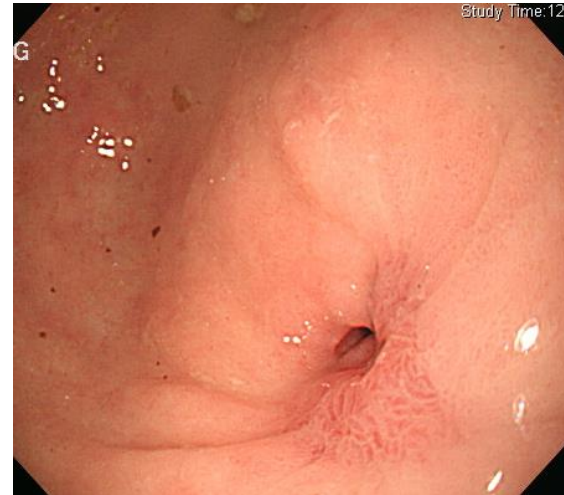
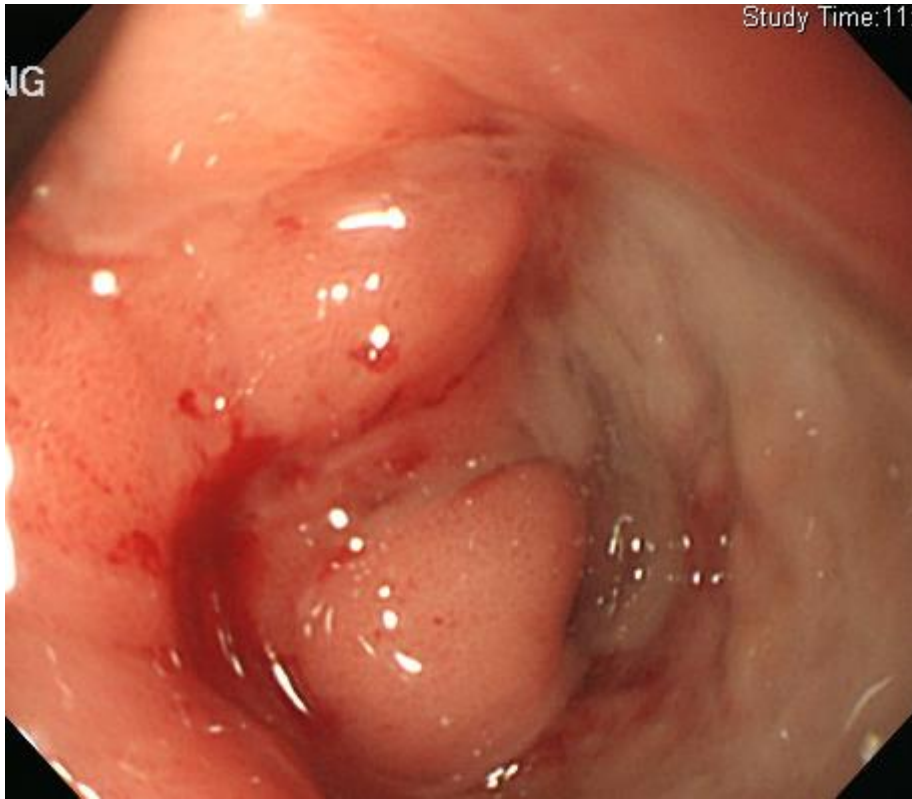
Duodenal ulcer – Healing stage



Duodenal ulcer – Scar stage



Duodenal ulcer with stricture



Approach of a patient with an uncomplicated gastric or duodenal ulcer

