



내시경 조직검사법 및 병리결과 해석

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내시경 조직검사의 목적

1. 암의 확정진단
2. 암의 침윤범위 결정
3. 암의 조직형 결정
4. 양, 악성의 감별진단
5. 양성 병변의 병리학적 진단
6. *Helicobacter pylori*의 진단
7. 위축, 장상피화생 등의 진단
8.

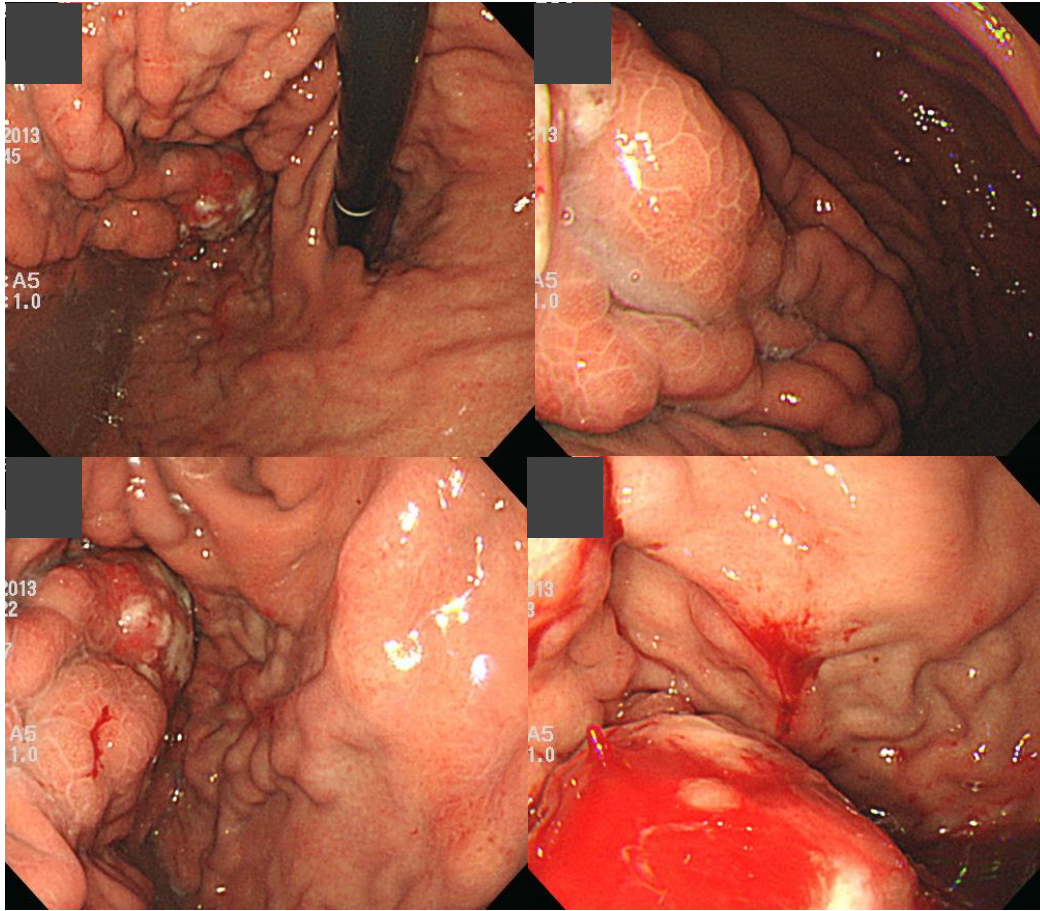
내시경 조직검사 금기

검사 후 **대출혈**이 발생하거나, **천공**될 가능성이 있는 병변

1. 위 정맥류
2. Vascular ectasia and GAVE
3. Visible vessel
4. 위 게실
5.

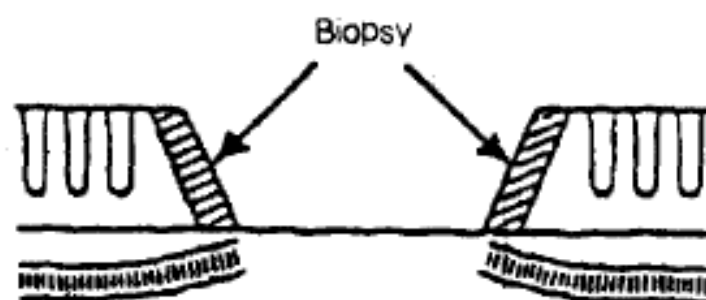
Pancreas cancer with gastric varix

- bleeding after a forcep biopsy → spontaneously stopped

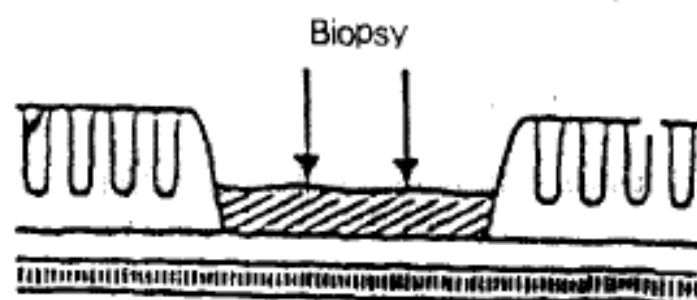


위암

- 암과 비암의 경계부가 이상적
- 백태가 부착된 부위는 좋지 않다.
- 작은 위암: 첫 조직검사가 가장 중요
- 확실한 암부위만?
 - 암일 가능성이 있는 부위
 - 암이 아니라고 생각되는 부위
- 정확한 targeting (sampling error)
- 위음성: 함요형, PW, Borrmann type IV, antrum/angle (>cardia/body), <4개



Ulcerated carcinoma
(type III)



Broadly ulcerated carcinoma
(type IIc)

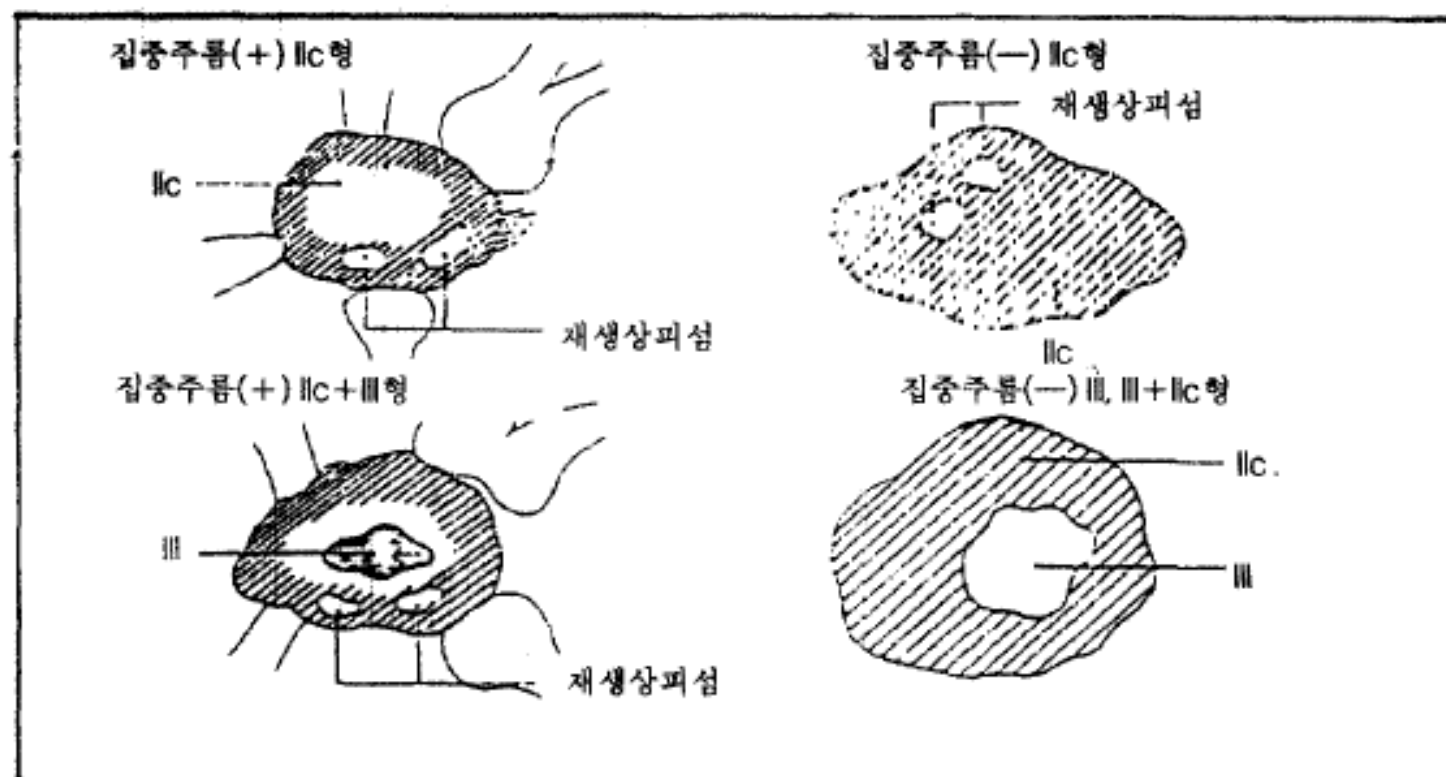


Fig. 4. 함몰형 위암의 생검부위(사선부위에 암세포가 존재).

Diagnostic yield by the biopsy site

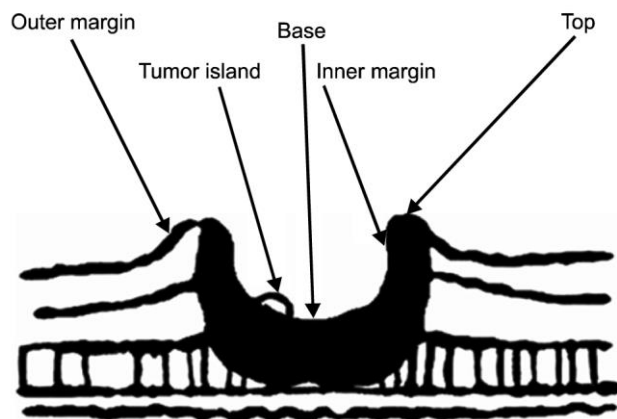


Fig. 1. Biopsy sites of advanced gastric cancer. For Borrmann type 2 or 3 cancers, biopsies were taken from the outer, top, inner margins of the surrounding ulcer border, the ulcer base and the tumor island. For Borrmann type 1 or 4 cancers, biopsies were randomly taken from the lesion.

Table 2. Number of biopsy sites and diagnostic yield

Biopsy site	No. of pt	Borrmann class				Diagnostic yield (%)
		1	2	3	4	
Outer margin	96	0	11/21	47/75	0	60.4
Top margin	96	0	21/22	45/74	0	68.8
Inner margin	91	0	20/21	46/70	0	72.5
Base	86	0	19/21	42/65	0	70.9
Tumor island	9	0	4/4	5/5	0	100
Random biopsy	5	1	0	0	4	100

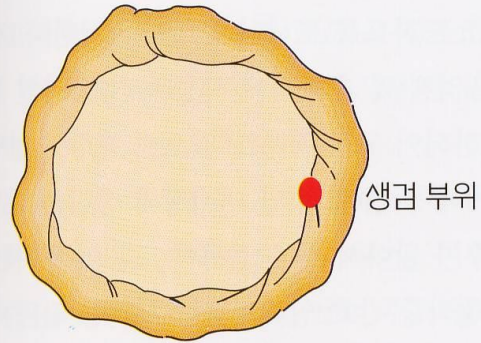


그림 2-3

생검은 궤양 변연의 안쪽 가장자리에서 얻는다.

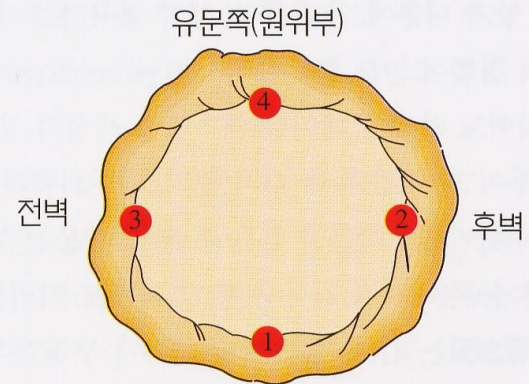


그림 2-4

위궤양은 근위부 변연, 후벽연, 전벽연, 원위부 변연 순으로 생검한다.

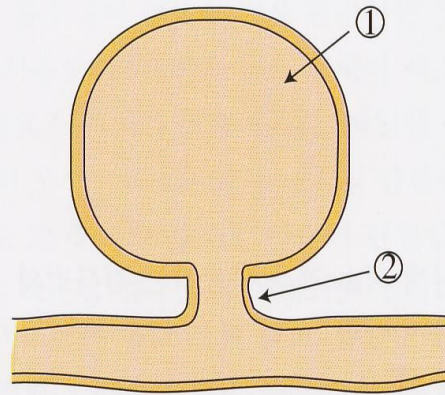
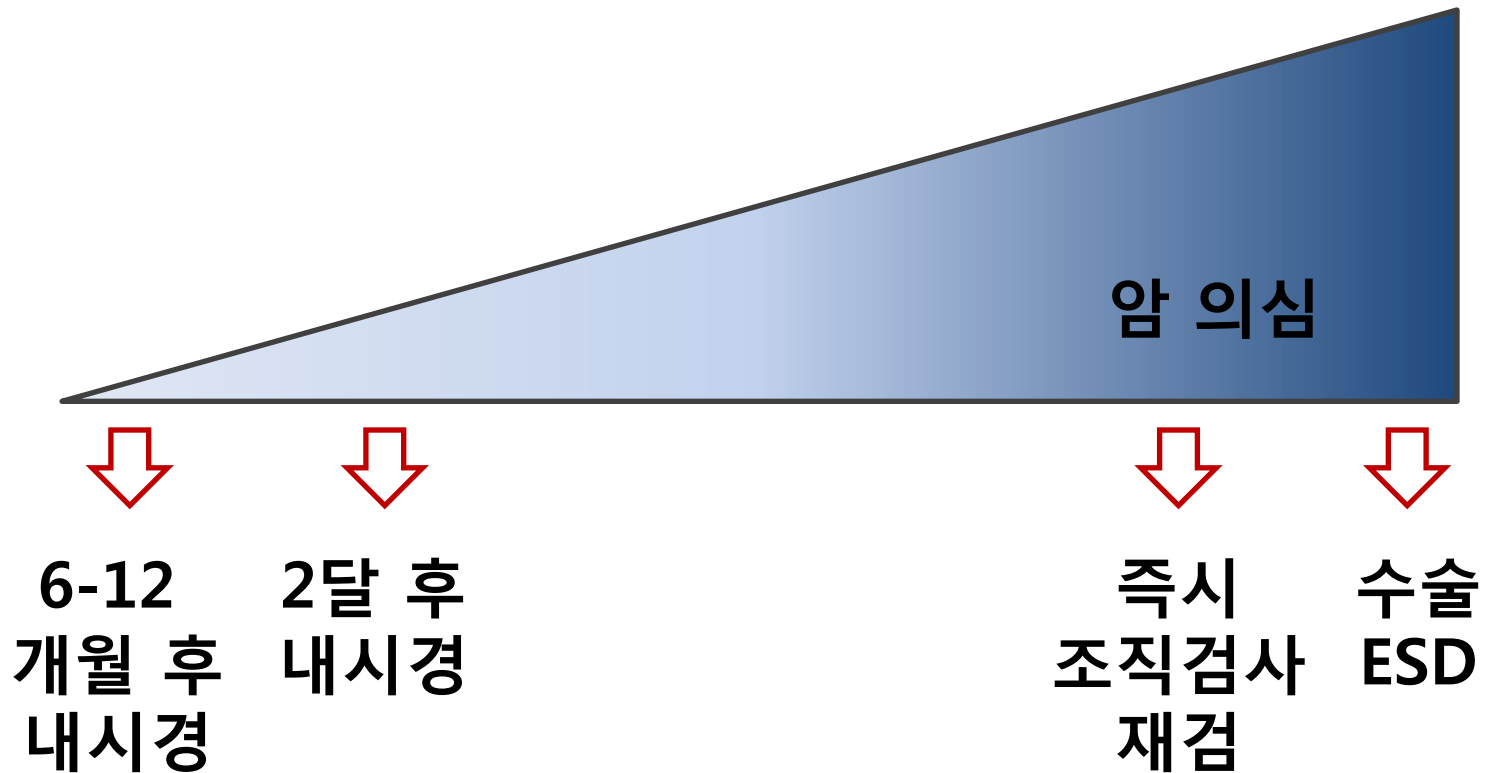


그림 2-5

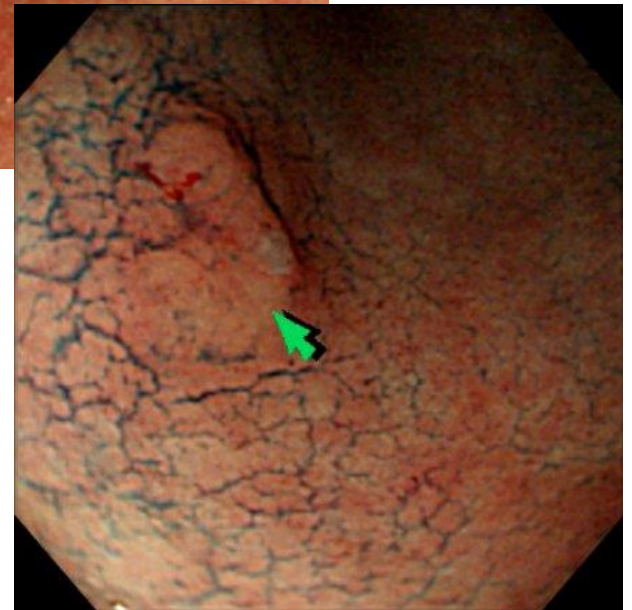
용종은 선단부 생검후 경부를 생검한다.

암의심 병소의 첫 조직검사 음성의 전략

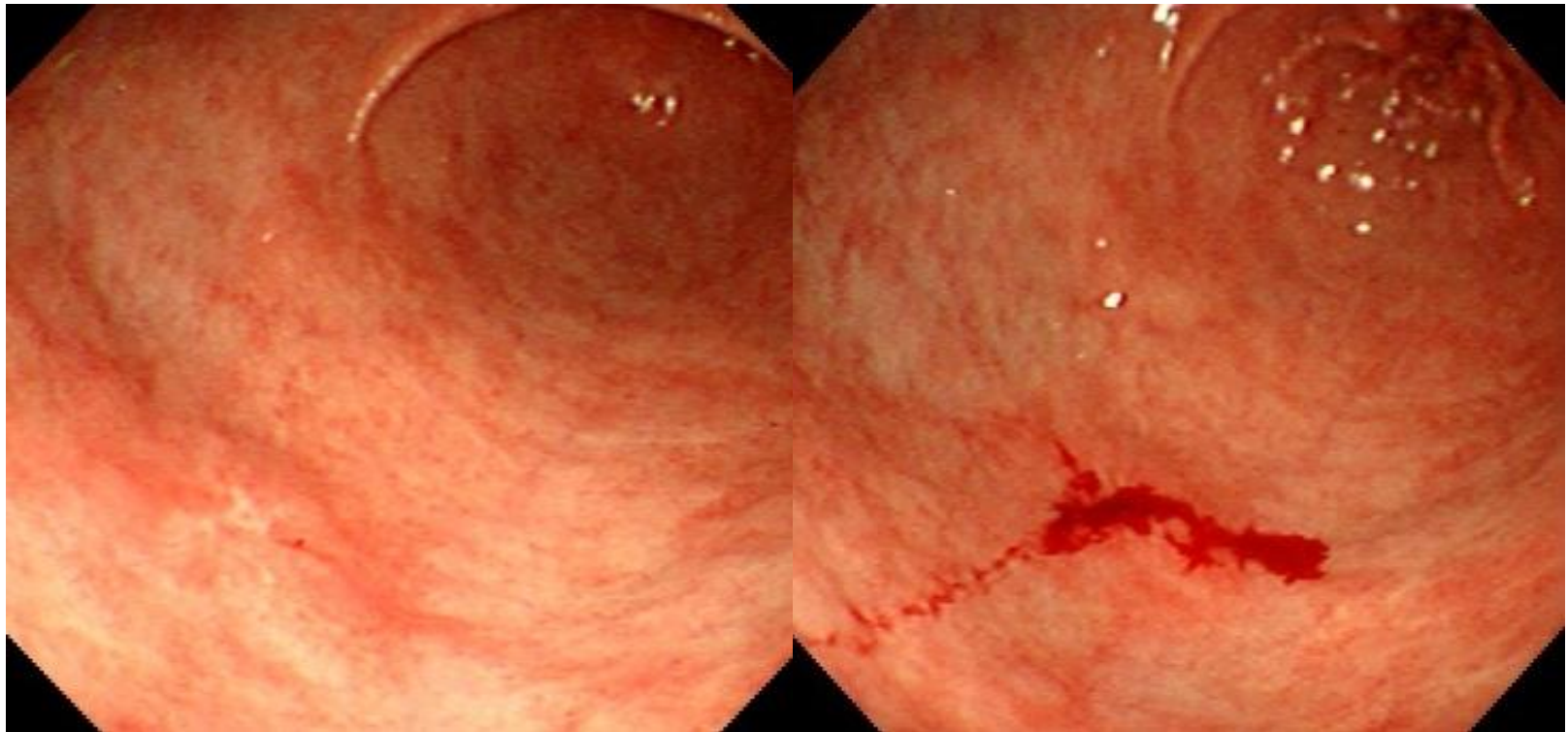
- 내시경 육안소견이 가장 중요하다



원경, 중경, 근경을 찍고 위치표시

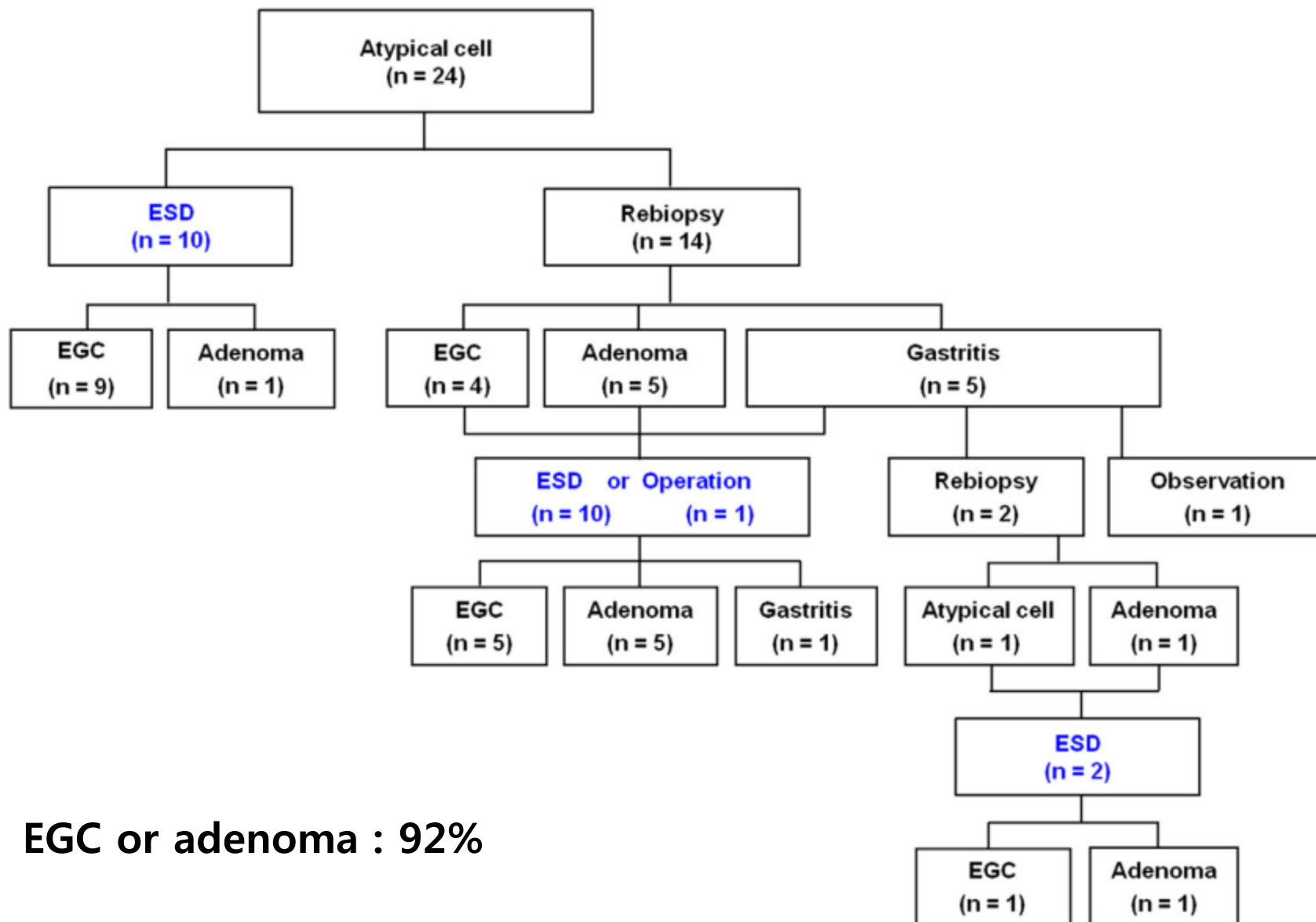


조직검사 (직전과) 직후에 사진촬영



Atypia (cells and glands) & regenerative atypia

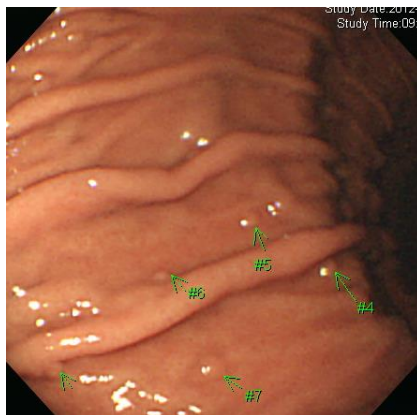
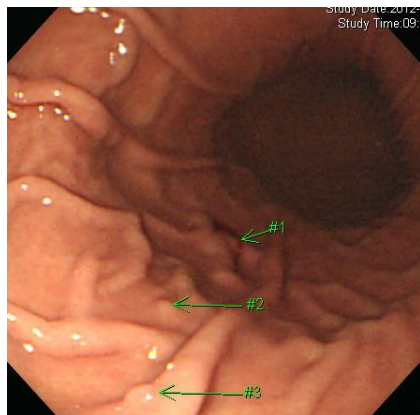
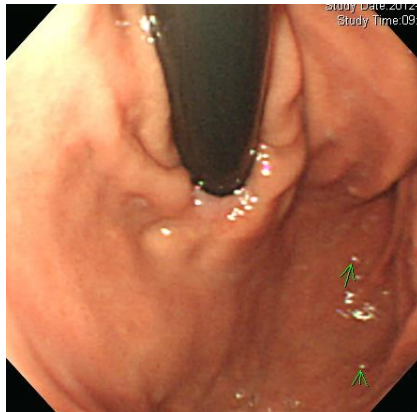
- 내시경 육안소견이 가장 중요하다.
- Atypia 80% 이상은 위암 또는 선종.
- Regenerative change가 있으면 암 위암이 상대적으로 낮음. 염증 소견이 강한 경우에는 염증의 호전 후에 다시 조직검사 하는 것도 좋겠음.
- 결국 추적관찰이 매우 중요.
 - 양성으로 보일때: 재생검(바로 또는 2개월 후)
 - 악성으로 보일때: ESD 또는 재생검(바로)



Multiple gastric polyps / erosions

- 5-6개 이상 폴립이 있을 때는 큰 폴립, 형태가 이상한 것, 표면의 불규칙한 것
- Fundic gland polyp이 확실하면 큰 것 한 두 개
- 미란성 위염은 단발이 경우 주의가 필요, 상대적으로 크거나 형태가 이상하면 조직검사

이렇게 모두 조직검사 해야 할 것인가?



THE UPDATED SYDNEY SYSTEM					
Site	H. pylori colonization	Neutrophil activity	Mononuclear cells	Atrophy	Intestinal metaplasia
1.body	absent	absent	mild	not applicable	absent
2.body	absent	absent	mild	not applicable	absent
3.body	absent	absent	mild	not applicable	absent
4.body	absent	absent	mild	not applicable	absent
5.body	absent	absent	mild	not applicable	absent
6.body	absent	absent	mild	not applicable	absent
7.body	absent	absent	mild	not applicable	absent
8.fundus	absent	absent	mild	not applicable	absent
9.fundus	absent	absent	mild	not applicable	absent

선종이라고 듣고 ESD 받았는데 암?

Table 1 Pretreatment and posttreatment diagnostic group classification for gastric dysplasias or cancers

Posttreatment diagnostic group	Pretreatment diagnostic group (%)				
	LGD (<i>n</i> =162)	HGD (<i>n</i> =164)	AI-EGC (<i>n</i> =396)	BAI-EGC (<i>n</i> =824)	AGC (<i>n</i> =495)
No residual	2 (1.2)	4 (2.4)	0	0	0
LGD	105 (64.8)	33 (20.1)	2 (0.5)	0	0
HGD	45 (27.8)	71 (43.3)	4 (1.0)	1 (0.1)	0
AI-EGC	5 (3.1)	36 (22.0)	258 (64.9)	22 (2.7)	1 (0.3)
BAI-EGC	5 (3.1)	19 (11.6)	131 (33.3)	720 (87.4)	72 (14.5)
AGC	0	1 (0.6)	1 (0.3)	81 (9.8)	422 (85.3)
Downgraded (%)	1.2	23.7	1.5	2.8	14.7
No change (%)	64.8	43.3	64.9	87.4	85.3
Upgraded (%)	34.0	34.1	33.6	9.8	0

LGD low-grade dysplasia, *HGD* high-grade dysplasia, *AI-EGC* absolute indication early gastric cancer, *BAI-EGC* beyond absolute indication early gastric cancer

Histologic diagnosis based on forceps biopsy is not adequate for determining endoscopic treatment of gastric adenomatous lesions

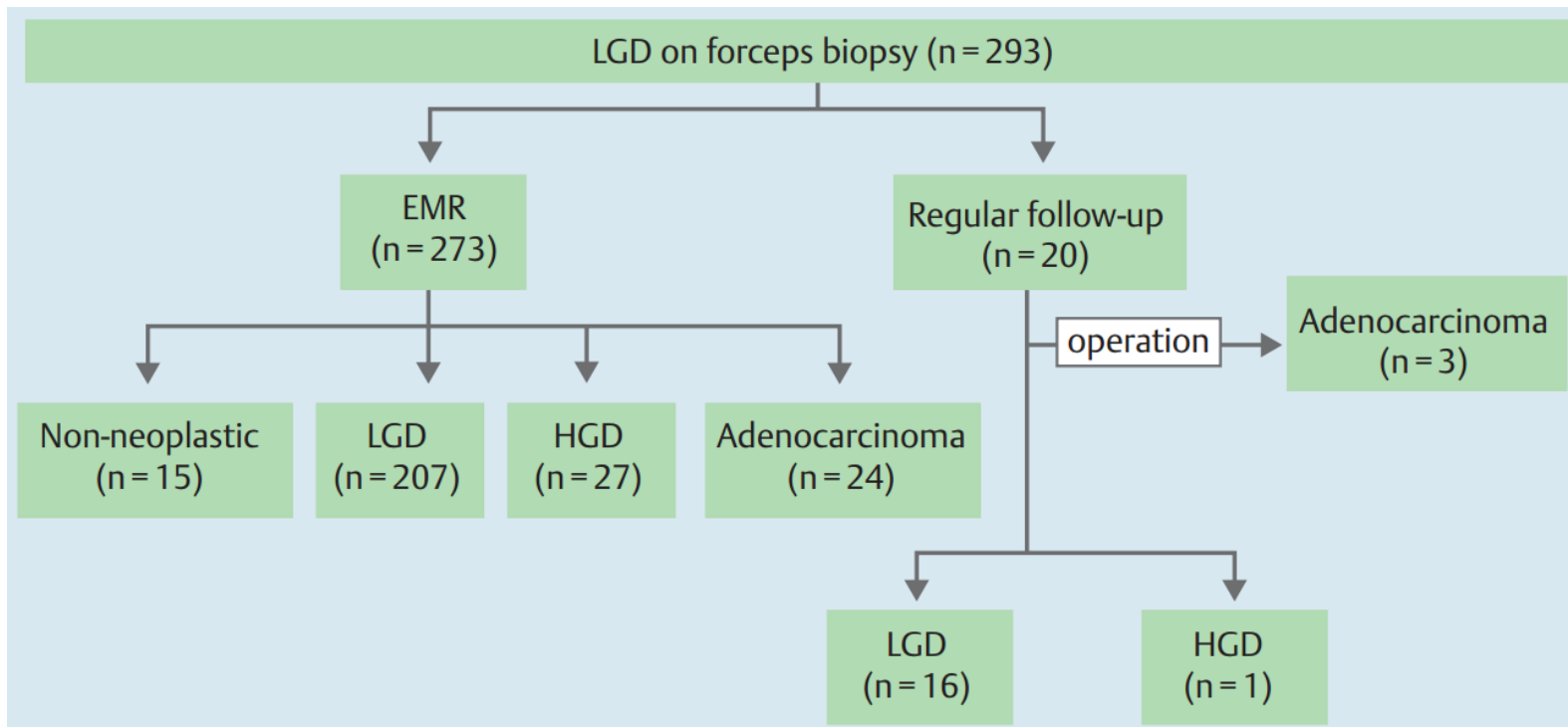
Authors

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Risk factor for upgraded diagnosis

Table 4 Multivariate analysis of endoscopic characteristics between concordant and upgraded cases.

	Concordant, n = 207	Upgraded, n = 51	P value	Odds ratio	95% CI	
					Lower	Upper
Number of biopsy fragments, mean $\pm$ SD (range)	2.9 $\pm$ 1.4 (1 – 10)	3.3 $\pm$ 1.5 (1 – 7)	0.470			
Lesion size, n (%)			0.081			
< 10 mm	60 (29.0)	11 (21.5)				
$\geq$ 10 mm and < 20 mm	115 (55.6)	26 (51.0)				
$\geq$ 20 mm and < 30 mm	28 (13.5)	8 (15.7)				
$\geq$ 30 mm	4 (1.9)	6 (11.8)				
Type, n (%)			0.448	1.31	0.65	2.63
Elevated	150 (72.5)	30 (58.8)				
Flat/depressed	57 (27.5)	21 (41.2)				
Whitish discoloration absent, n (%)	124 (59.1)	46 (90.2)	0.001	5.29	1.95	14.37
Spontaneous bleeding present, n (%)	7 (3.4)	6 (11.8)	0.124	1.96	0.53	7.24

CI, confidence interval.

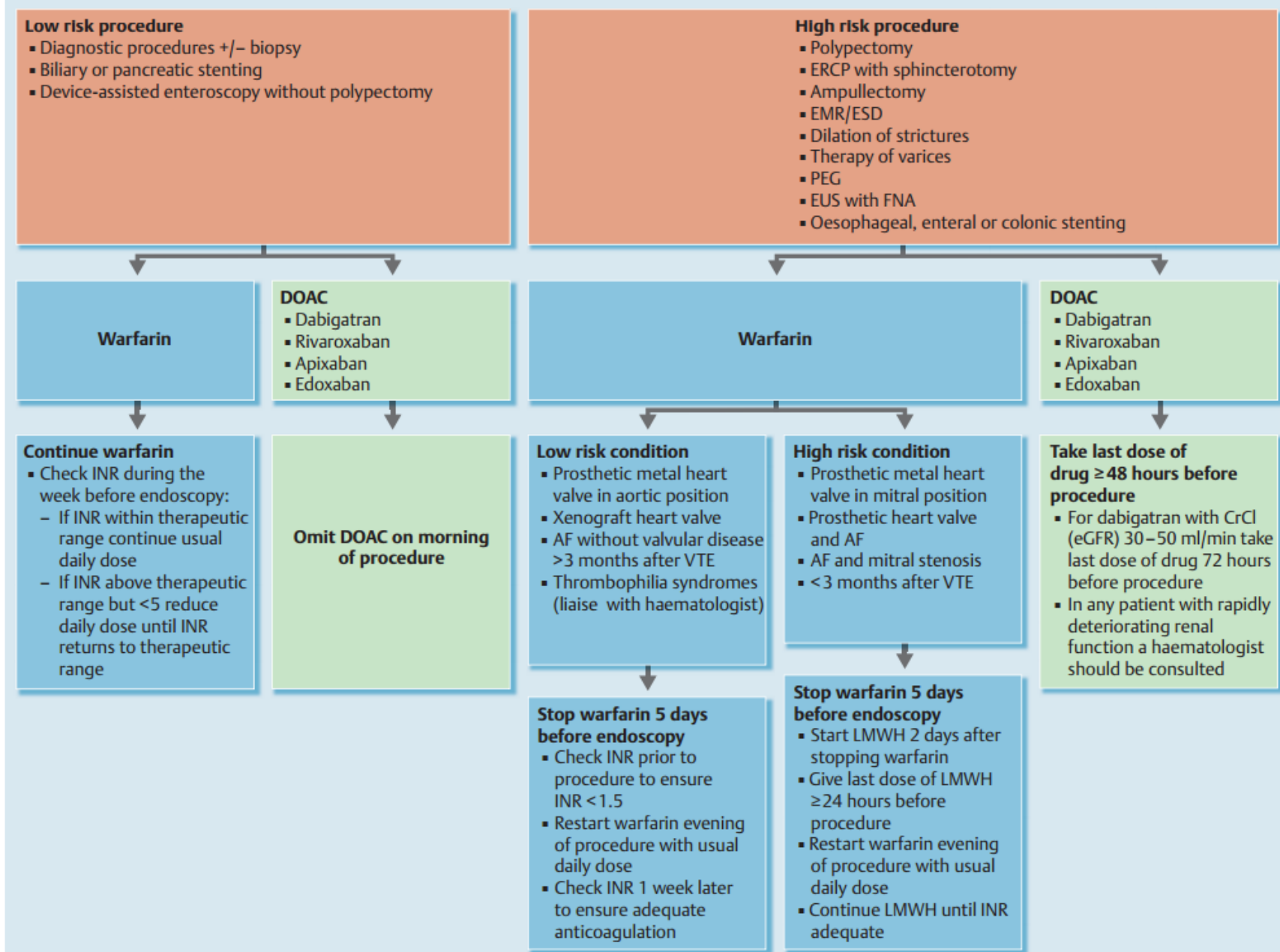


Fig.2 Guidelines for the management of patients on warfarin or direct oral anticoagulants (DOAC) undergoing endoscopic procedures.

EGD Biopsy Forceps



▶ 품명 : BIOPSY FORCEPS

▶ 규격 및 코드 :

FB-19K-1 / 525777258

FB-24K-1 / 525777250

FB-25K-1 / 525777251

Forceps width/channel Ø/length

- 19K : **5mm** / 2mm / 155cm

- 24K : 8mm / 2.8mm / 155cm

(needle +)

- 25K : **6mm** / 2.8mm / 155cm

▶ 제조사명 : OLYMPUS