

The Efficacies of the Combination Chemotherapy in Patients with Advanced Gastric Cancer

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소화불량 및 복부 불편감을 주소로 내원한 44세, 75세 남자가 진행성 위암으로 진단을 받고 항암화학 치료를 시행하였다.

44세 남자 환자는 총 4차례에 걸쳐 DCF 항암치료를 받았으며, 남은 잔여 병변에 대해서는 외과에서 위 절제술을 시행할 예정이다.

75세 남자는 총 9차례에 걸쳐 FOLFOX-4 항암 치료를 받은 후에 완전 반응을 보였으며, 현재 더 이상의 항암치료 없이 외래 추적 관찰 중이다.

CASE I

1039275 송 0 헌(44/M) 내원일: 12.02.23~

Chief complaint :

Dyspepsia, abdominal discomfort

Onset) 1개월 전

1039275 송 0 현(44/M)

Present illness:

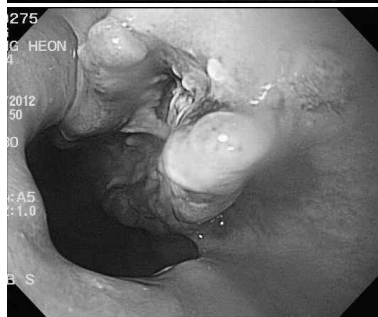
1개월 전부터 속이 더부룩하며, 식사 후 소화가 잘 되지 않아 개인의원 내원하여 시행한 위내시경 및 조직검사 결과 stomach cancer 진단되어 본원 소화기내과에 내원함.

2012. 2. 24) Duodenoscopy

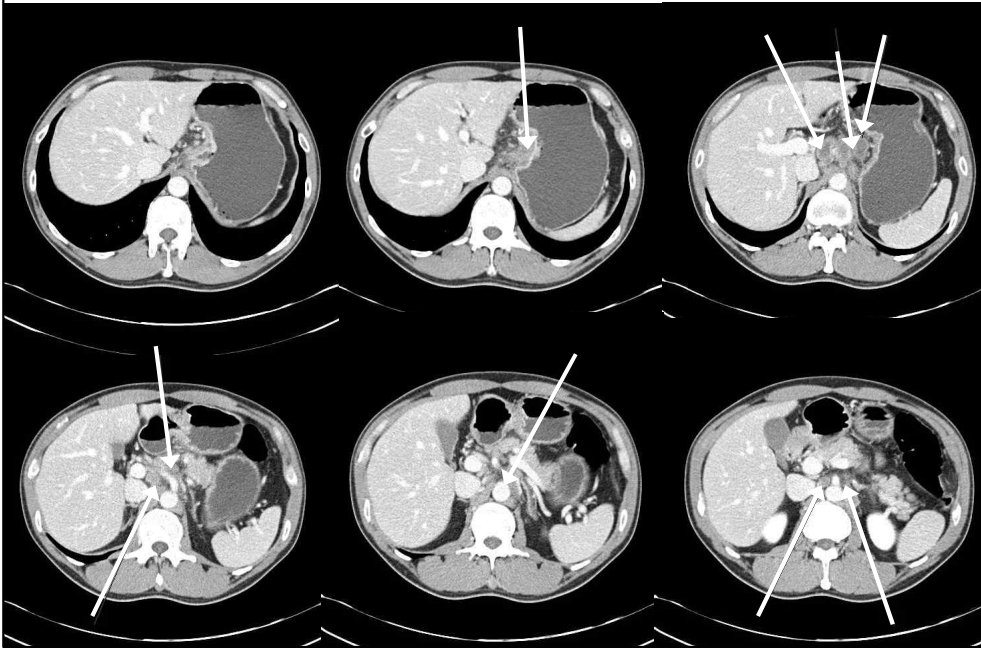
위식도 접합부 상방 1 cm부터 구부에 걸쳐 약 3x4 cm 크기의 중심궤양이 있는 ulcerofungating mass가 있는 AGC-3 소견을 보임.

Biopsy: signet ring cell carcinoma, poorly differentiated

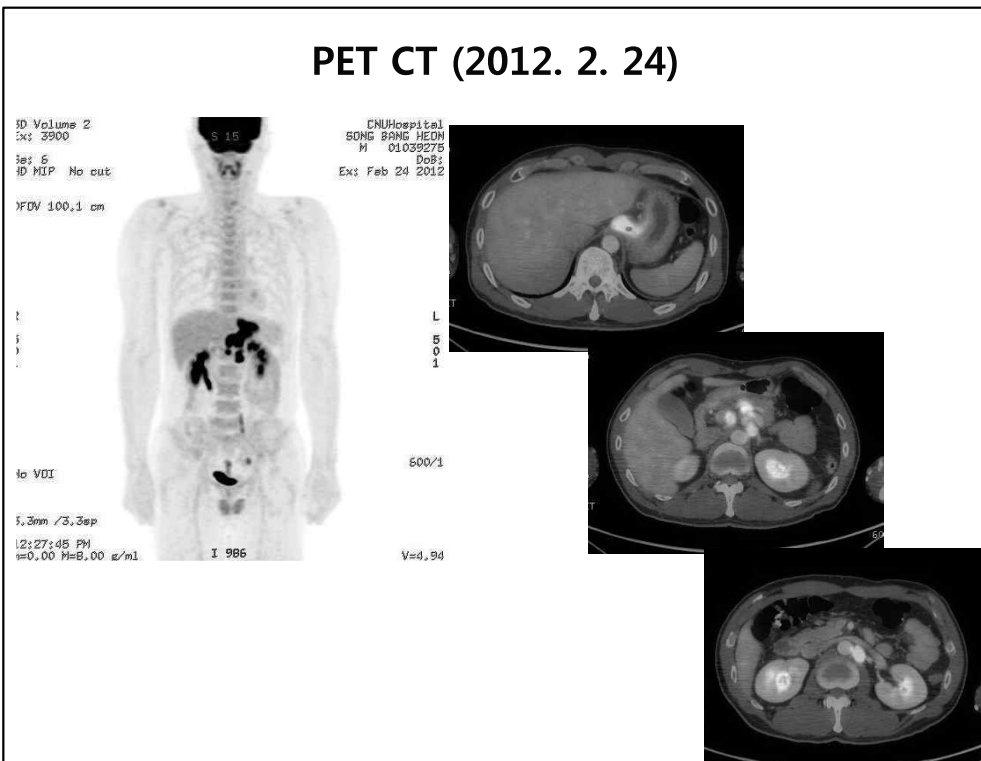
Duodenoscopy (2012. 2. 24)



Abd-pelvic CT (2012. 2. 23)



PET CT (2012. 2. 24)



1039275 송 0 현(44/M)

Present illness:

AGC with esophageal invasion & multiple LNs meta로 항암치료를 위해
소화기내과로 입원함.

1039275 송 0 현(44/M)

Past Medical History

DM/HTN/Pul Tbc/Hepatitis (-/-/-)

No major op Hx (-)

Social History

Smoking/Alc/Herb med (+/+/-)

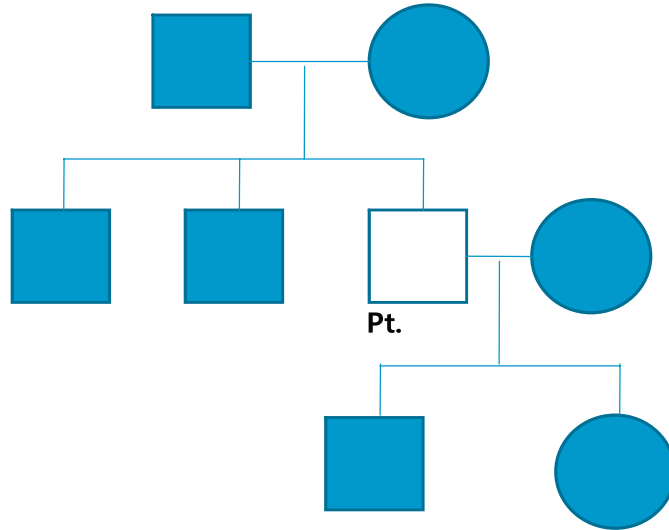
Smoking – 1 pack/d x 15yrs -> 15 packyrs

Alcohol – daily 소주 1병 x 25 yrs

Occupation – 회사원

1039275 송 0 헌(44/M)

Family History



Initial Laboratory Finding (2010. 07. 30)

Complete Blood Count			
WBC	8,050/uL	Platelet	315K/uL
Hb	15.3g/dL	Seg.	64.5%
Chemistry		Urinalysis	
AST/ALT	13/13 IU/L	Specific gravity	1.031
ALP	49 IU/L	pH	5.5
TP/Albumin	6.5/4.2 g/dL	Nitrate	-
Glucose	80 mg/dL	Protein	-
CRP	0.1 mg/dL	Glucose	-
T. Bilirubin	0.8 mg/dL	Bilirubin	-
BUN/Cr	12.6/0.9 mg/dL	RBC	0-1
Na/K/Cl	137/3.9/106 mEq/L	WBC	0-1
Total Ca/P	8.9/3.7 mg/dL	Coagulation profile	
LDH	400 IU/L	PT(INR)/aPTT	11.6(1.1) / 25.5
HBsAg/Anti-HBs/Anti-HCV/Anti-HIV/VDRL (-/+/-/-) CEA: 628.6 ng/mL			

Problem list

#1. AGC (signet ring cell carcinoma) [T4aN3aM1] with esophageal invasion & multiple LNs metastasis

Assessment & Plan

#1.

A) AGC (signet ring cell carcinoma) [T4aN3aM1] with esophageal invasion & multiple LNs metastasis

P)

1. 항암치료 시행

(DCF)

Docetaxel (75 mg/m²) D1 (40 gtt)

Cisplatin (60 mg/m²) D1 (40 gtt)

5-FU (750 mg/m²) D1-D5 (10 gtt) q 3 weeks

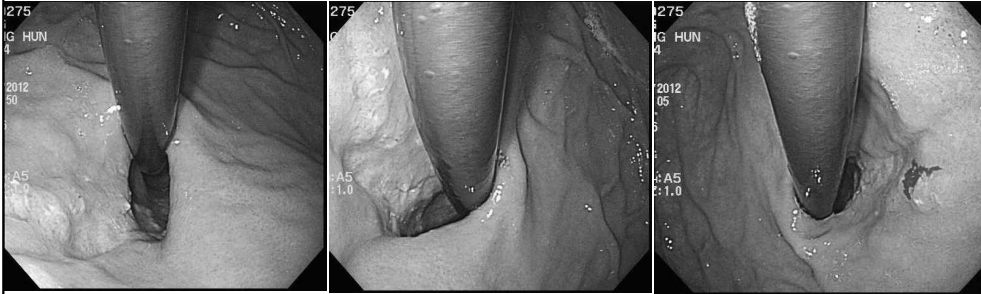
Hospital course

(2012. 3~6월, #1-4. DCF)

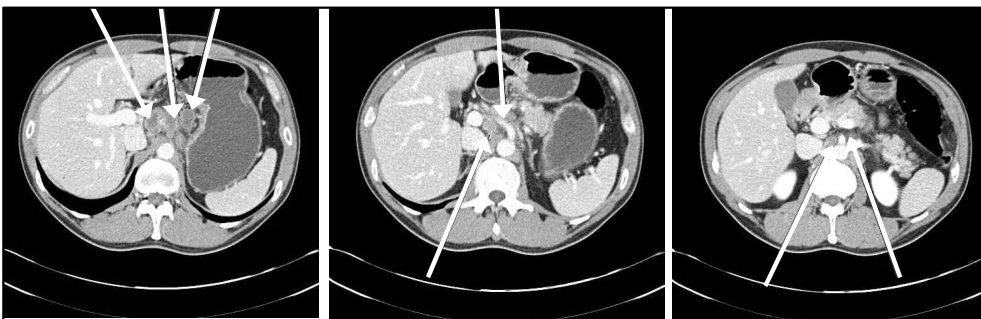
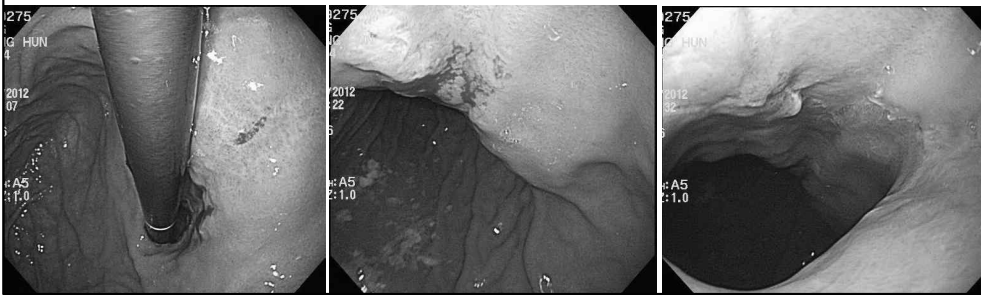
Duodenoscopy (2012. 4. 26)



Duodenoscopy (2012. 6. 28)



Bx: Poorly cohesive carcinoma (signet ring cell carcinoma)

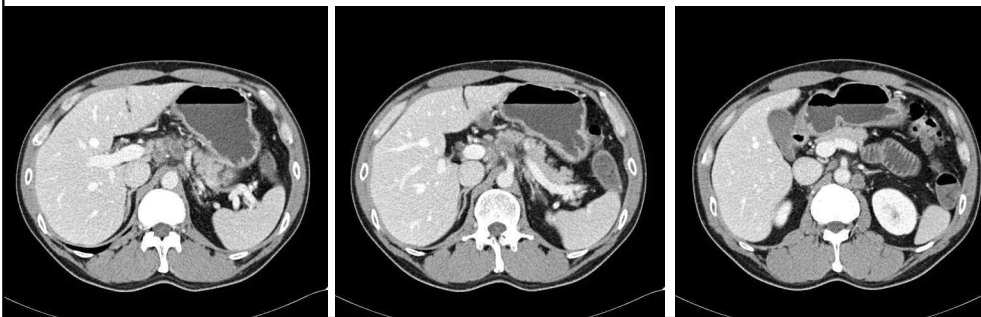


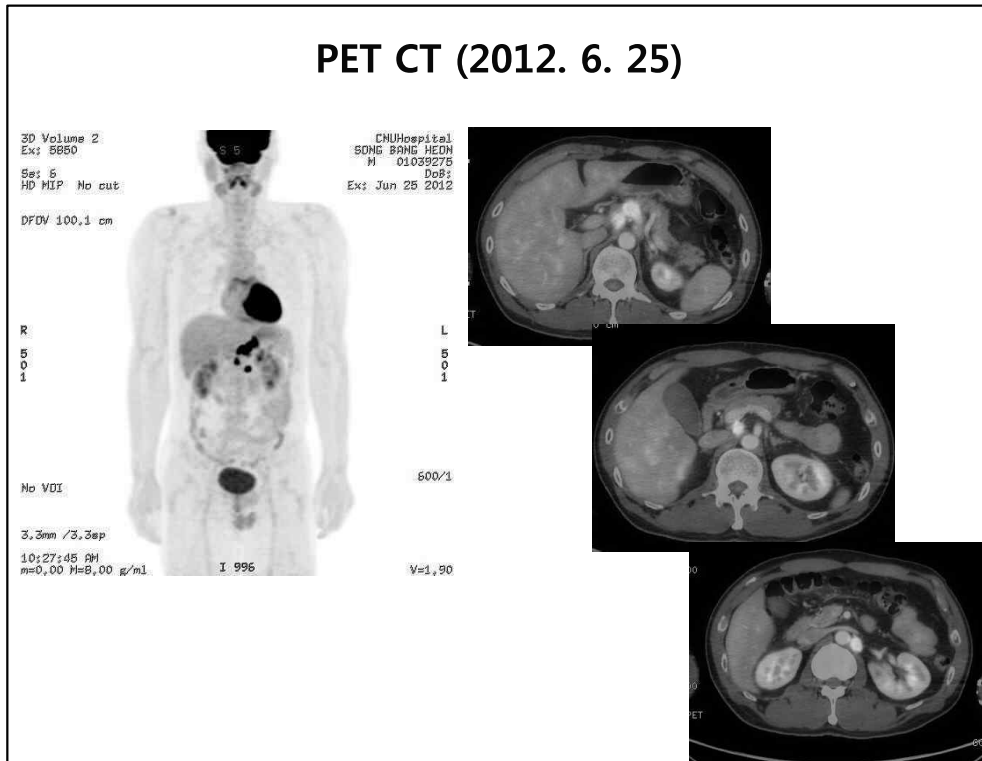
2012.2.23

2012.6.28



#1-4. DCF





2012. 7. 5

#1. AGC s/p #1-4. DCF

S) 양 하지부종 외에 특이증상 호소 없음

O)

2012.6.25) PET CT

2012.6.28) Duodenoscopy

2012.6.28) Abd-pelvic CT

A) AGC [T4aN3aM1] with esophageal invasion, multiple LNs metastasis → SD

P) Primary lesion에 대해 GS op. (TG with RY-EJ) 시행 후 LNs meta에 대해서는 RTx 치료를 고려하기로 함

CASE II

1174162 권 0 열(75/M) 내원일: 10.07.30~

Chief complaint :

Dyspepsia, abdominal discomfort

Onset) 3개월 전

1174162 권 0 열(75/M)

Present illness:

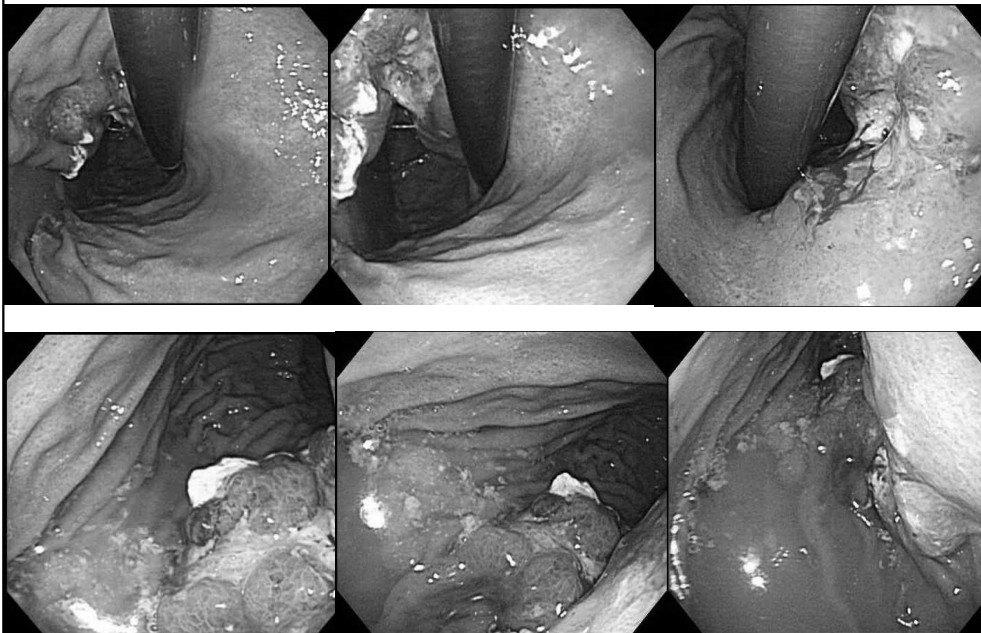
3개월 전부터 속이 더부룩하며, 식사 후 소화가 잘 되지 않아 개인 의원 내원하여 시행한 위내시경 및 조직검사 결과 stomach cancer 진단되어 본원 소화기내과에 내원함.

2010.6.29) Duodenoscopy

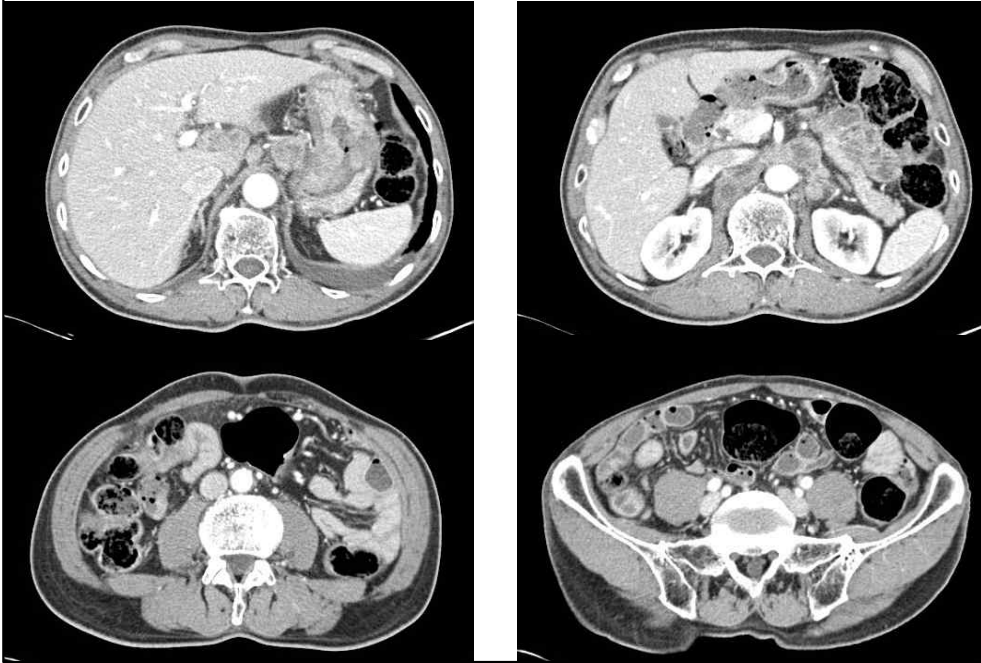
체상부 대만측과 후벽측에 걸쳐 4x3 cm 크기의 궤양성 침윤 양상의 AGC-3 소견을 보임.

Biopsy: adenocarcinoma, poorly differentiated

Duodenoscopy (2010. 6. 29)



Abd-pelvic CT (2010. 6. 29)



1174162 권 0 열(75/M)

Present illness:

AGC with peritoneal seeding & multiple LNs meta로 항암 치료를

위해 혈액종양내과로 입원함

1174162 권 0 열(75/M)

Past Medical History

DM/HTN/Pul Tbc/Hepatitis (-/-/-/-)

No major op Hx (-)

Social History

Smoking/Alc/Herb med (+/-/-)

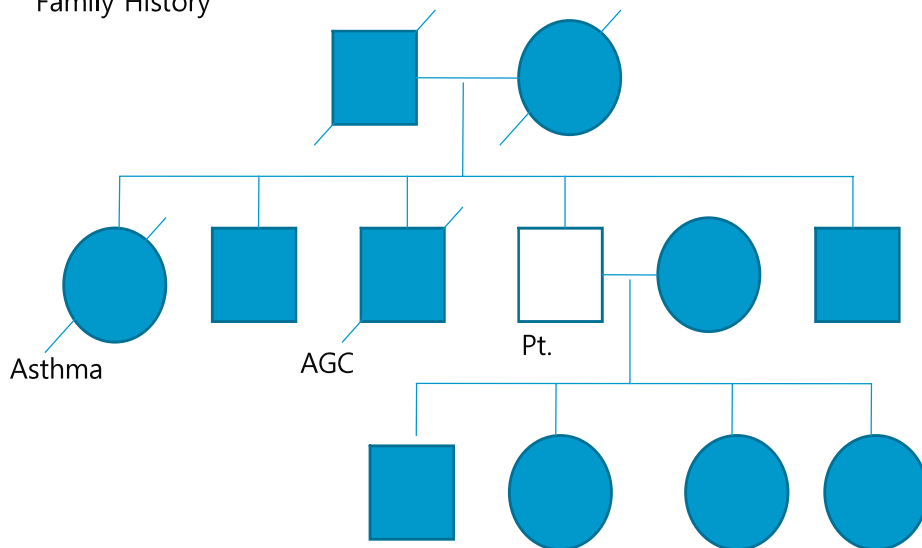
Smoking – 2 pack/d x 30yrs -> 60 packyrs

Alcohol – 6년 전 중단. daily 소주 2병 x 20 yrs

Occupation – 농부

1174162 권 0 열(75/M)

Family History



Initial Laboratory Finding (2010. 07. 30)			
Complete Blood Count			
WBC	5,500/uL	Platelet	291K/uL
Hb	10.9g/dL	Seg.	68.8%
Chemistry		Urinalysis	
AST/ALT	15/7 IU/L	Specific gravity	1.019
ALP	40 IU/L	pH	6.5
TP/Albumin	6.8/3.1 g/dL	Nitrate	-
Glucose	119 mg/dL	Protein	-
CRP	0.3 mg/dL	Glucose	-
T. Bilirubin	0.6 mg/dL	Bilirubin	-
BUN/Cr	23/0.9 mg/dL	RBC	1-2
Na/K/Cl	140/4.1/106 mEq/L	WBC	0-1
Total Ca/P	9.3/3.6 mg/dL	Coagulation profile	
LDH	310 IU/L	PT(INR)/aPTT	12.6(1.1) / 22.9
HBsAg / Anti-HBs / Anti-HCV / Anti-HIV / VDRL (-/+/-/-) CEA: 3.2 ng/mL			

Problem list

#1. AGC (adenocar) [T4aN3bM1] with peritoneal seeding & multiple

LN's meta

Assessment & Plan

#1.

A) AGC [T4aN3bM1] with peritoneal seeding & multiple LNs meta

P)

1. 항암치료 시행

(FOLOFOX-4)

5-FU (400 mg/m²) D1, 2 (H2, bolus)

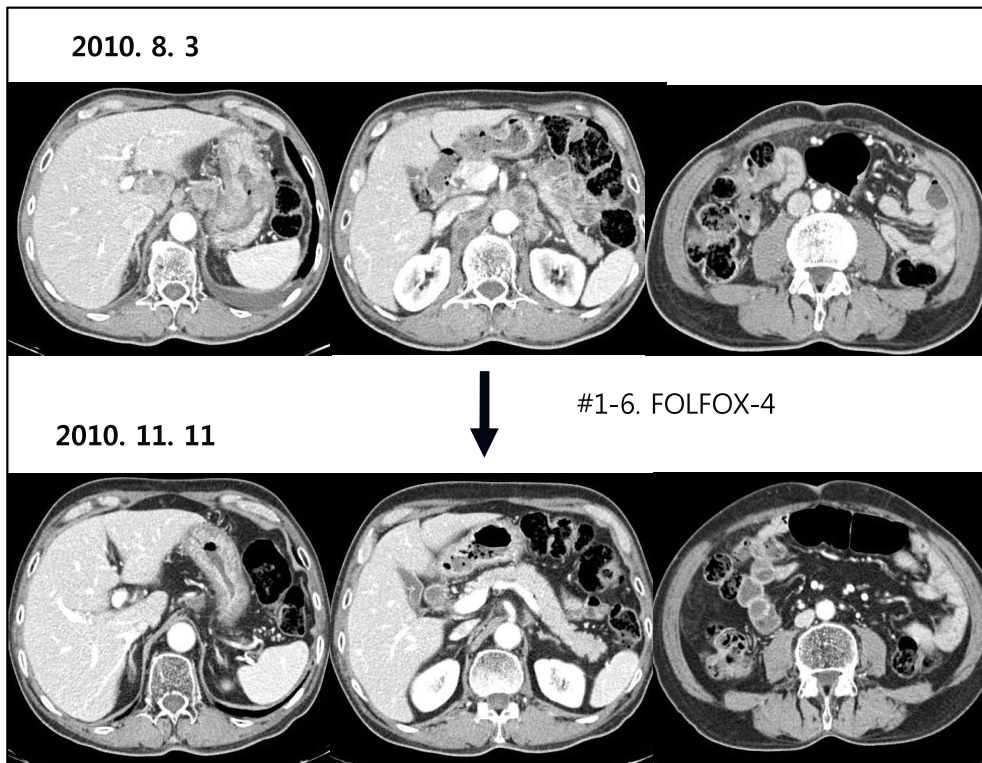
5-FU (600 mg/m²) D1,2 (H2-24)

Oxaliplatin (85 mg/m²) D1 (H0-2)

Leucovorin (200 mg/m²) D1, 2 (H0-2) q 2 weeks

Hospital course

(2010. 8~11월, #1-9. FOLFOX-4)



2011. 2. 9

#1. AGC IV (peritoneal seeding)

S) Fatigue, General weakness, Grade III

O)

#1-9. FOLFOX-4

ANC 830

A) AGC T4aN1M1 (peritoneal seeding): PR state

P) 독성으로 항암 치료는 hold하고 경과 관찰하기로 함

2012. 7. 3

#1. AGC s/p #1-9. FOLFOX-4

S) 특이증상 호소 없음

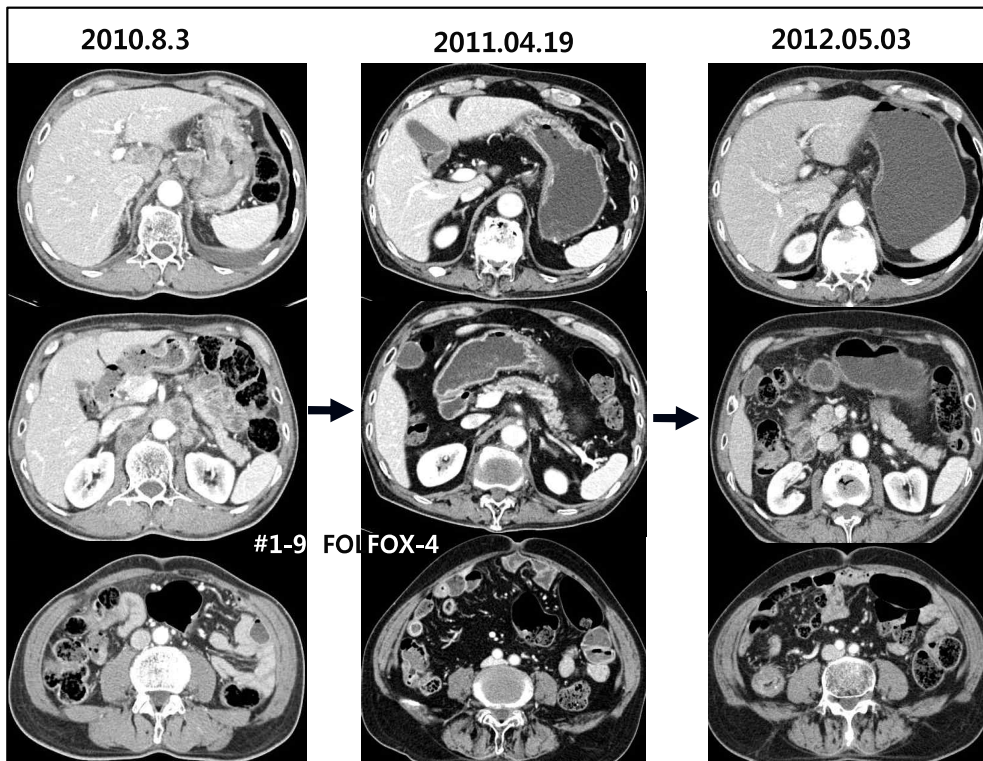
O)

2012.5.3) Abd-pelvic CT

- No visible significant abnormal wall thickening, stomach
- No evidence of metastasis, abdomen.
- No abnormal LAP in significant size, abdomen

A) AGC [T4aN1M1] with peritoneal seeding → CR state

P) 외래 추적하며 경과 관찰하기로 함



Points of Discussion

- What evaluation are needed in assessing elderly cancer patients?

Comprehensive geriatric assessment (CGA)

ADL (activities of daily living)

IAOI (instrumental activities of daily living)

CGA

Component	Elements
Medical assessment	Problem list Comorbid conditions and disease severity Medication review Nutritional status
Assessment of functioning	Basic activities of daily living ADL Instrumental activities of daily living IADL Activity/exercise status Gait and balance
Psychological assessment	Mental status (cognitive) testing Mood/depression testing
Social assessment	Informal support needs and assets Care resource eligibility/financial assessment
Environmental assessment	Home safety Transportation and telehealth

Staging systems

- the American Joint Committee on Cancer (AJCC) and the International Union Against Cancer (UICC)
- The staging schema of the AJCC/UICC is based upon tumor (T), node (N), and metastasis (M) classifications
- T stage is dependent on depth of tumor invasion and not size
- Nodal stage is based upon the number of positive lymph nodes rather than the proximity of the nodes to the primary tumor

Staging systems

- Regional nodes curvature (greater curvature, greater omental, gastroduodenal, gastroepiploic, pre-pyloric antrum, and pancreaticoduodenal),
- lesser curvature (lesser curvature, lesser omental, left gastric, cardioesophageal, common hepatic, celiac and hepatoduodenal), and pancreatic and splenic area (pancreaticolienal, peripancreatic, splenic)
- Involvement of other intraabdominal nodal groups (ie, hepatoduodenal, retropancreatic, portal, mesenteric, and paraaortic) is classified as distant metastases.

Staging (6th edition)

Primary Tumor (T)

- TX Primary tumor cannot be assessed
- T0 No evidence of primary tumor
- Tis Carcinoma in situ: intraepithelial tumor without invasion lamina propria
- T1 Tumor invades lamina propria or submucosa
- T2 Tumor invades muscularis propria or subserosa†
- T2a Tumor invades muscularis propria
- T2b Tumor invades subserosa
- T3 Tumor penetrates serosa (visceral peritoneum) without invasion of adjacent structures‡
- T4 Tumor invades adjacent structures‡

Staging (6th edition)

Regional Lymph Nodes (N)

- NX Regional lymph node(s) cannot be assessed
- N0 No regional lymph node metastasis§
- N1 Metastasis in 1 to 6 regional lymph nodes
- N2 Metastasis in 7 to 15 regional lymph nodes
- N3 Metastasis in more than 15 regional lymph nodes

Distant Metastasis (M)

- MX Distant metastasis cannot be assessed
- M0 No distant metastasis
- M1 Distant metastasis

Staging (6th edition)

6th EDITION

Summary of Changes

- T2 lesions have been divided into T2a and T2b.
- T2a is defined as tumor that invades the muscularis propria.
- T2b is defined as tumor that invades the subserosa.

T2a- Invades muscularis propria.

T2b- Invades subserosa.

Stage 0	Tis	N0	M0
Stage IA	T1	N0	M0
Stage IB	T1	N1	M0
	T2a/b	N0	M0
Stage II	T1	N2	M0
	T2a/b	N1	M0
	T3	N0	M0
Stage IIIA	T2a/b	N2	M0
	T3	N1	M0
	T4	N0	M0
Stage IIIB	T3	N2	M0
Stage IV	T4	N1-3	M0
	T1-3	N3	M0
	Any T	Any N	M1

Staging (7th edition)

TNM staging for gastric cancer

Primary tumor (T)	
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
Tis	Carcinoma in situ: intraepithelial tumor without invasion of the lamina propria
T1	Tumor invades lamina propria, muscularis mucosae, or submucosa
T1a	Tumor invades lamina propria or muscularis mucosae
T1b	Tumor invades submucosa
T2	Tumor invades muscularis propria*
T3	Tumor penetrates subserosal connective tissue without invasion of visceral peritoneum or adjacent structures* ^Δ
T4	Tumor invades serosa (visceral peritoneum) or adjacent structures* ^Δ
T4a	Tumor invades serosa (visceral peritoneum)
T4b	Tumor invades adjacent structures
Regional lymph nodes (N)	
NX	Regional lymph node(s) cannot be assessed
N0	No regional lymph node metastasis [◇]
N1	Metastasis in 1-2 regional lymph nodes
N2	Metastasis in 3-6 regional lymph nodes
N3	Metastasis in seven or more regional lymph nodes
N3a	Metastasis in 7-15 regional lymph nodes
N3b	Metastasis in 16 or more regional lymph nodes

Staging (7th edition)

Anatomic stage/prognostic groups			
Stage 0	Tis	N0	M0
Stage IA	T1	N0	M0
Stage IB	T2	N0	M0
	T1	N1	M0
Stage IIA	T3	N0	M0
	T2	N1	M0
	T1	N2	M0
Stage IIB	T4a	N0	M0
	T3	N1	M0
	T2	N2	M0
	T1	N3	M0
Stage IIIA	T4a	N1	M0
	T3	N2	M0
	T2	N3	M0
Stage IIIB	T4b	N0	M0
	T4b	N1	M0
	T4a	N2	M0
	T3	N3	M0
Stage IIIC	T4b	N2	M0
	T4b	N3	M0
	T4a	N3	M0
Stage IV	Any T	Any N	M1