

Session I

3. Therapeutic Options in Elderly Patients with Pancreatic Cancer

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1. Case presentation

88세 여자 환자로 2주간 지속된 식욕부진과 소화불량으로 내원하였다. 외부 병원에서 시행한 혈액 검사 상 당뇨가 첫 진단되었으며(HbA1C 8.6%), CA19-9 (43.15)와 CEA (6.34)의 상승 소견 있어 큰 병원 진료 권유 받았고 본원 내분비내과 내원하여 컴퓨터단층촬영(CT) 및 혈액 검사를 계획하였다. 일주일 뒤 우상복부 통증, 발열 있어 응급실 방문하였고 혈액 검사 상 폐쇄성 황달(obstructive jaundice) 소견을 보였다. CT 상 췌장두부암(pancreatic head cancer)에 의한 총담관(common bile duct) 폐쇄 소견을 보였다.

2. Diagnosis

Pancreatic head cancer

3. Therapy and Clinical course

세포흡인 검사 상 선암으로 진단되었고, 고령임을 감안하여 TS-1 40 mg bid (orally for 28 days, followed by a 14-day rest)를 시작하였다. 2차, 4차 항암 치료 후 촬영한 CT 상 종양 크기 특별한 변화 없이 유지되는 소견을 (stable disease) 보였다. 이후 SBRT (stereotactic body radiotherapy) 받고 보존적 치료 중이다.

4. Conclusion

고령의 췌장암 환자로 palliative treatment를 하였던 증례를 소개하고자 한다.

Key words: Pancreatic cancer, Elderly patient, TS-1, SBRT

REFERENCES

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2. Imaoka H, Kou T, Tanaka M, Egawa S, Mizuno N, Hijioka S, et al. Clinical outcome of elderly patients with unresectable pancreatic cancer treated with gemcitabine plus S-1, S-1 alone, or gemcitabine alone: Subgroup analysis of a randomised phase III trial, GEST study. *Eur J Cancer*. 2016;54:96-103.

F/88

CC Poor oral intake (onset:
2WA)

PI 내원 2주 전부터 식사를 잘 하지 못하고 소화불량 지속되어 혈액검사 시행

#1. 당뇨 첫 진단 (HbA1C 8.6%) #2. CA19-9 (43.15), CEA (6.34) 상승 소견 있어

큰 병원 진료 권유받고 SNUBH 내분비내과 내원

⇒ 내분비내과에서 tumor marker 상승에 대한 원인 규명 위해 PB-CT + lab. 처방

⇒ 일주일 뒤 RUQ pain(+), fever(+) 있어 응급실 내원

Patient information

V/S 142/75-55-18-39.4°C

PMHx. dyslipidemia

ROS RUQ discomfort (+)

poor oral intake (+), weight loss (-)

FMHx. none

P/E icteric, epigastric tenderness (+)

SHx. Alcohol (-), smoking (-)

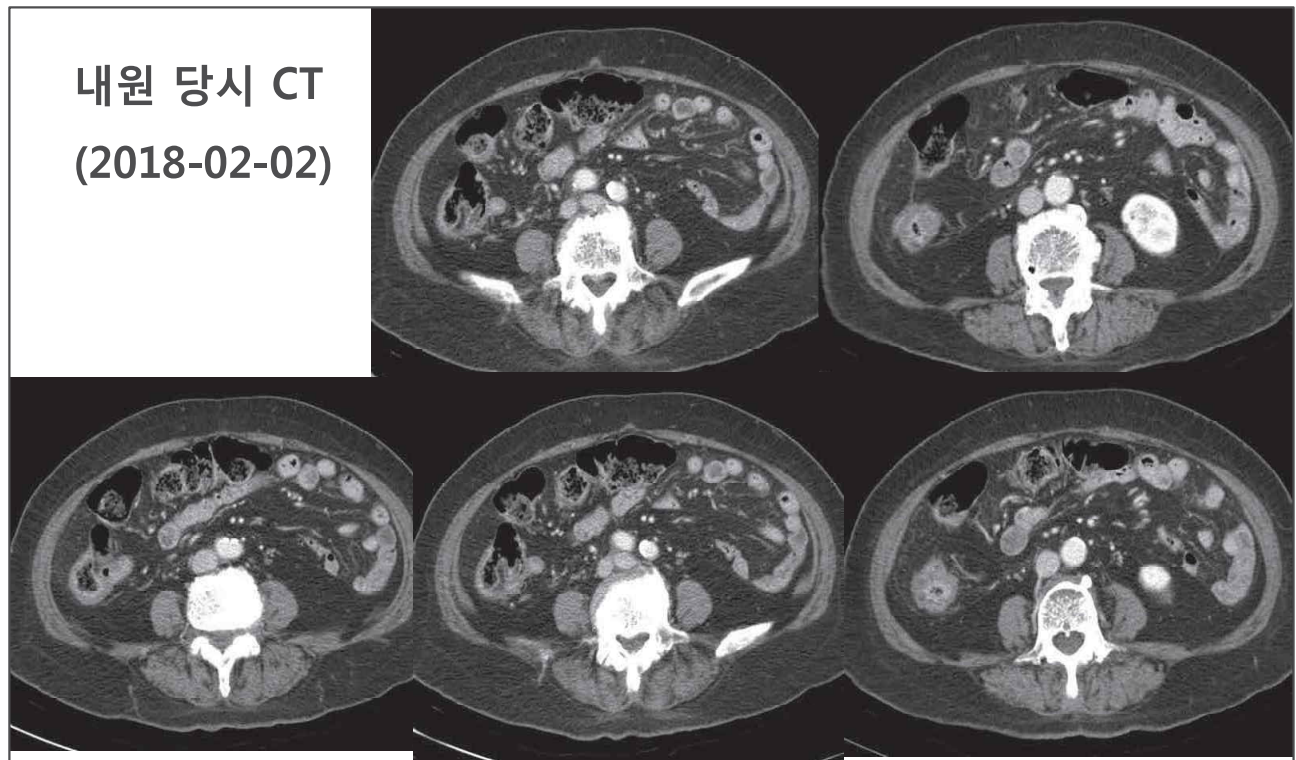
Lab WBC 14,690 (seg. 82.3%)

T-B 6.28 (D-B 4.63)

신체계측 Ht 142 cm, BWt 53 kg

ALP 366 r-GT 515

AST/ALT 390/409 CRP 7.19



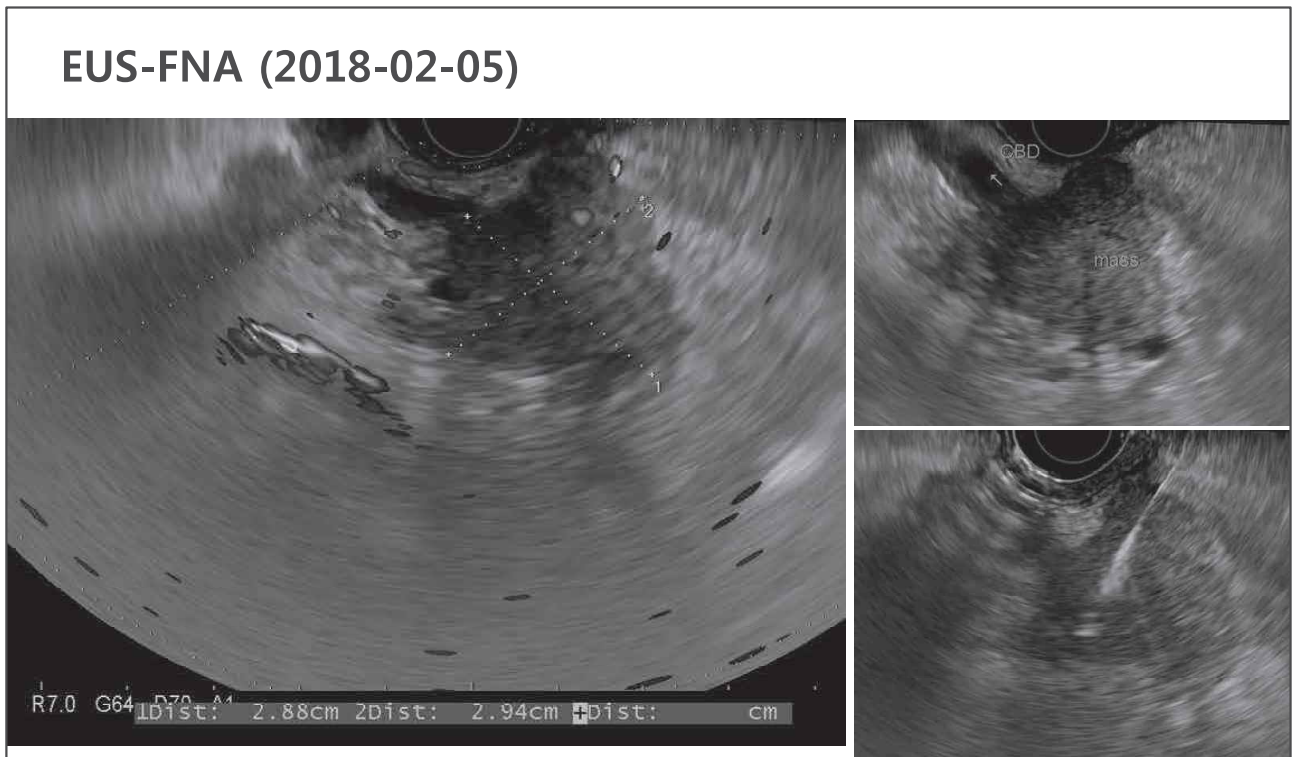
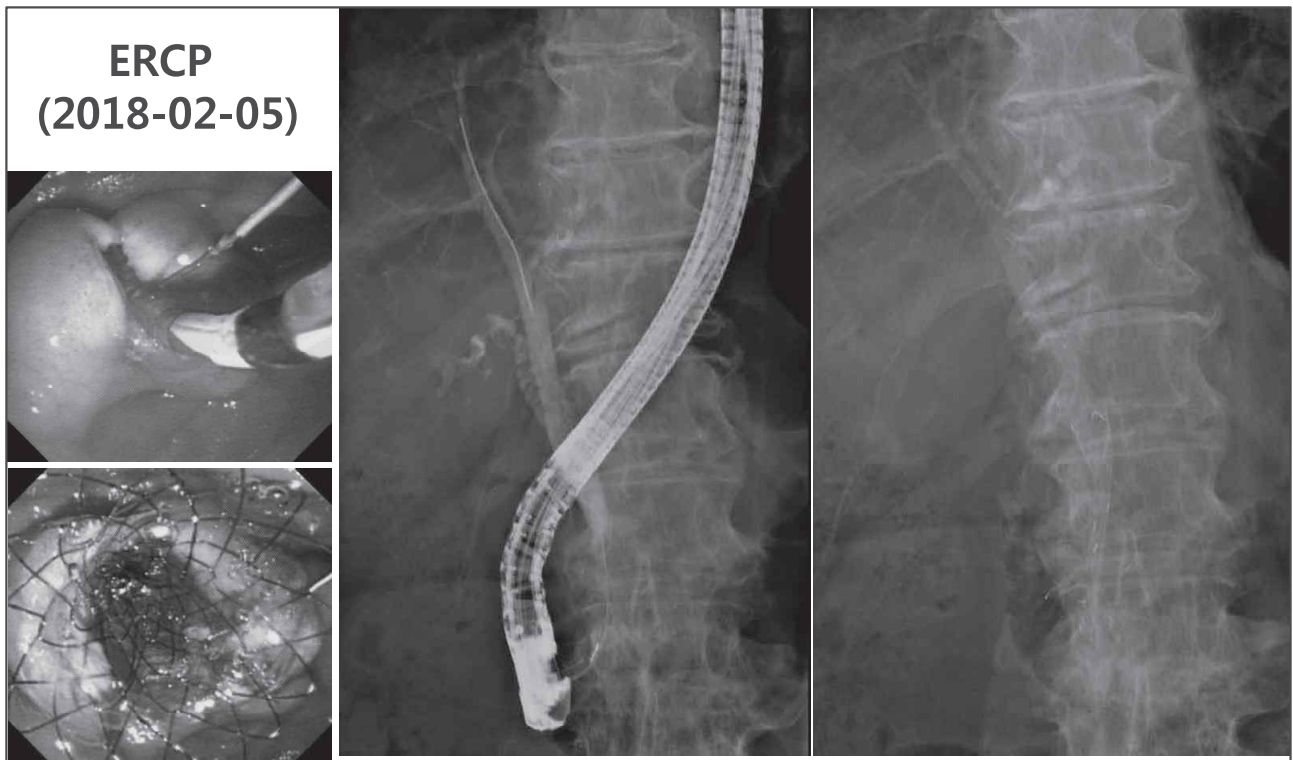
F/88

Assessment

#1. Obstructive cholangitis

#2. Pancreatic cancer

#3. Newly-diagnosed DM



Pathology

Pancreas, head, EUS-FNA biopsy : Ductal adenocarcinoma

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< MICRO (1 HE) >
DIAGNOSIS :
Pancreas, head, EUS-FNA biopsy ;
SPECIMEN FROM: Pancreas head
SPECIMEN ADEQUACY
Adequate for evaluation
Cellularity:
3: highly cellular-More than 10 clusters or nests
Stromal tissue
2: present with invasive tumor within stroma
Necrosis
1: present (focal)
HISTOLOGIC DIAGNOSIS
VI. Positive for malignancy
Ductal adenocarcinoma
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Therapeutic Plan?

F/88 with pancreatic cancer (ECOG 1)

Plan?

- #1 Operation
- #2 Best Supportive Care (BSC)
- #3 Chemotherapy
- #4 Radiotherapy

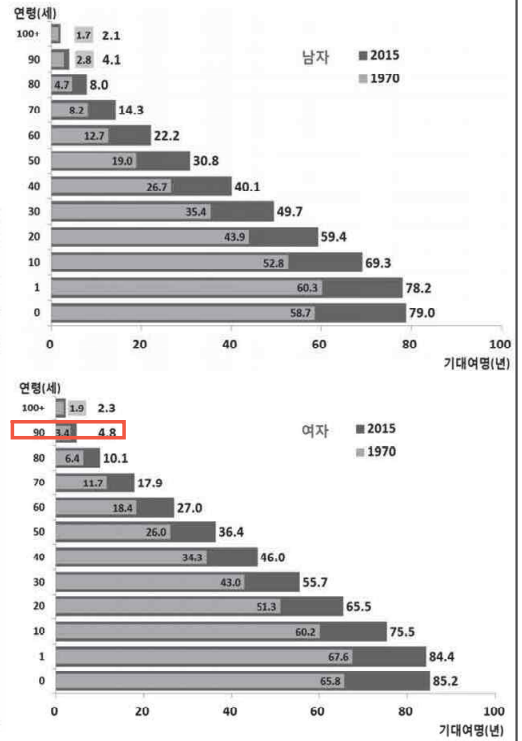
Chemotherapy?

- #1 Gemcitabine
- #2 Gem/Erlotinib
- #3 Gem/Nab-paclitaxel
- #4 FOLFIRINOX
- #5 Others

2016년 통계청, 연령별 기대여명

(단위: 년)

연령	남 자						여 자							
	1970	1995	2005	2014	2015	증 감	1970	1995	2005	2014	2015	증 감		
													'15~'70	'15~'14
0세	58.7	69.7	74.9	78.6	79.0	20.2	0.4	65.8	77.9	81.6	85.0	85.2	19.4	0.1
1세	60.3	69.3	74.2	77.8	78.2	17.9	0.4	67.6	77.6	80.9	84.3	84.4	16.8	0.1
10세	52.8	60.7	65.4	68.9	69.3	16.5	0.4	60.2	68.9	72.1	75.3	75.5	15.2	0.1
20세	43.9	51.1	55.5	59.0	59.4	15.5	0.4	51.3	59.1	62.2	65.4	65.5	14.2	0.1
30세	35.4	41.7	45.9	49.3	49.7	14.3	0.4	43.0	49.4	52.4	55.6	55.7	12.7	0.1
40세	26.7	32.6	36.4	39.7	40.1	13.4	0.3	34.3	39.8	42.7	45.9	46.0	11.6	0.1
50세	19.0	24.2	27.5	30.5	30.8	11.9	0.3	26.0	30.5	33.2	36.3	36.4	10.3	0.1
60세	12.7	16.7	19.3	22.0	22.2	9.5	0.2	18.4	21.7	24.0	26.9	27.0	8.6	0.1
70세	8.2	10.5	12.2	14.1	14.3	6.1	0.2	11.7	13.7	15.4	17.9	17.9	6.2	0.0
80세	4.7	6.1	6.9	7.8	8.0	3.3	0.1	6.4	7.8	8.5	10.1	10.1	3.7	-0.0
90세	2.8	3.3	3.6	4.0	4.1	1.2	0.1	3.4	4.2	4.2	4.9	4.8	1.5	-0.1
100세이상	1.7	1.8	1.9	2.1	2.1	0.4	0.0	1.9	2.2	2.2	2.4	2.3	0.4	-0.1

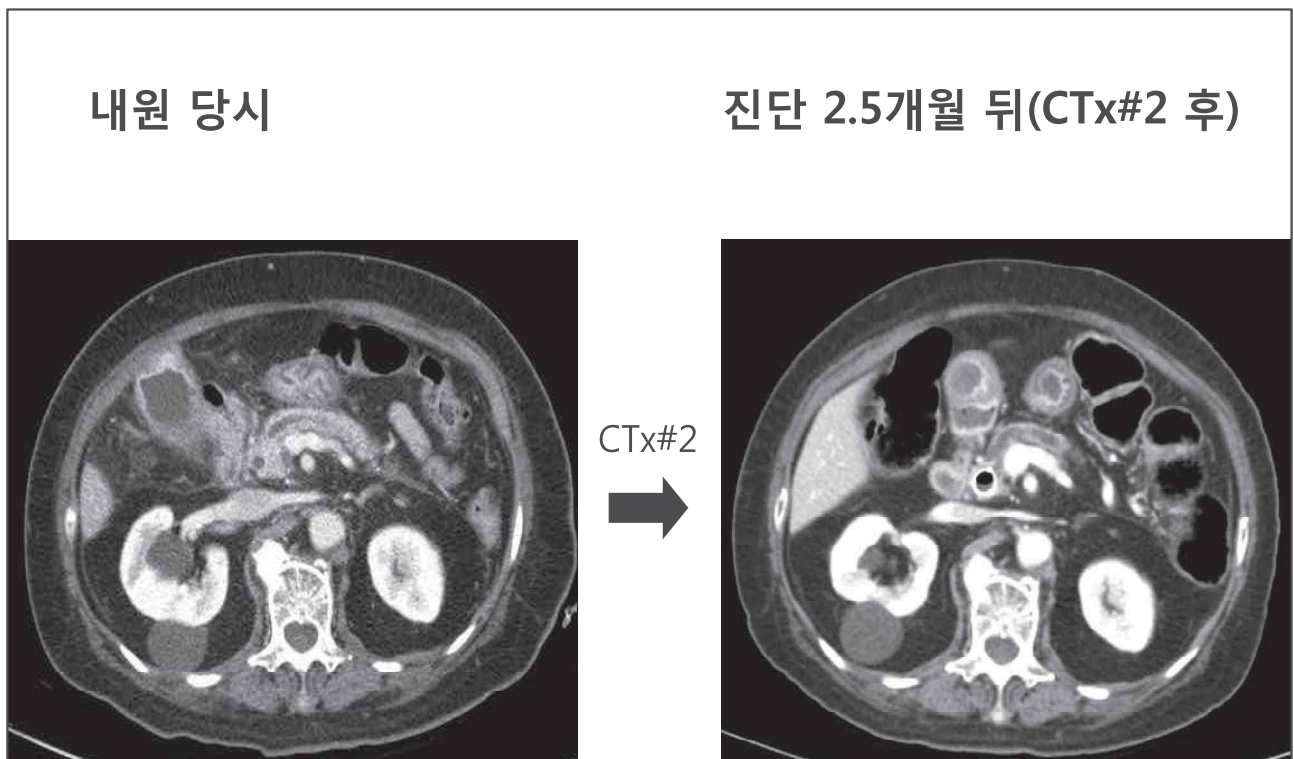
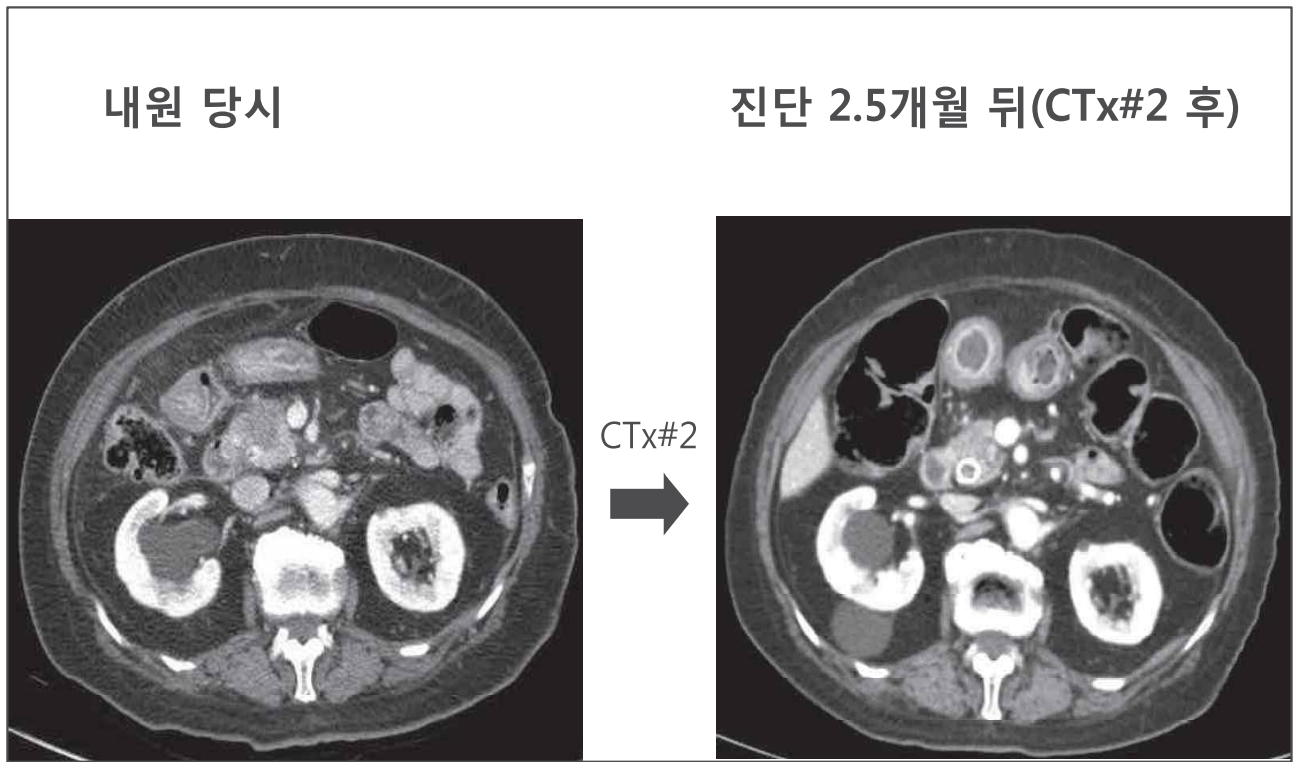


Progression note

Chemotherapy record: TS-1 40 mg bid (orally for 28 days, followed by a 14-day rest)

차수	일자
#1	2018. 2. 8~3. 1 (4 wks)
#2	2018. 3. 27~4. 24 (4 wks)

➡ 1차 반응 평가



Progression note

Chemotherapy record: TS-1 40 mg bid (orally for 28 days, followed by a 14-day rest)

차수	일자
#1	2018. 2. 8~3. 13 (4 wks)
#2	2018. 3. 27~4. 24 (4 wks)

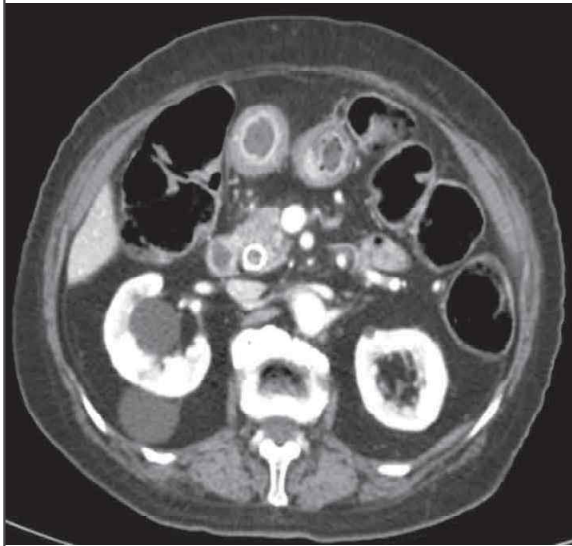
➡ 1차 반응 평가

차수	일자
#3	2018. 5. 8~6. 5 (4 wks)
#4	2018. 6. 19~7. 17 (4 wks)

➡ 2차 반응 평가

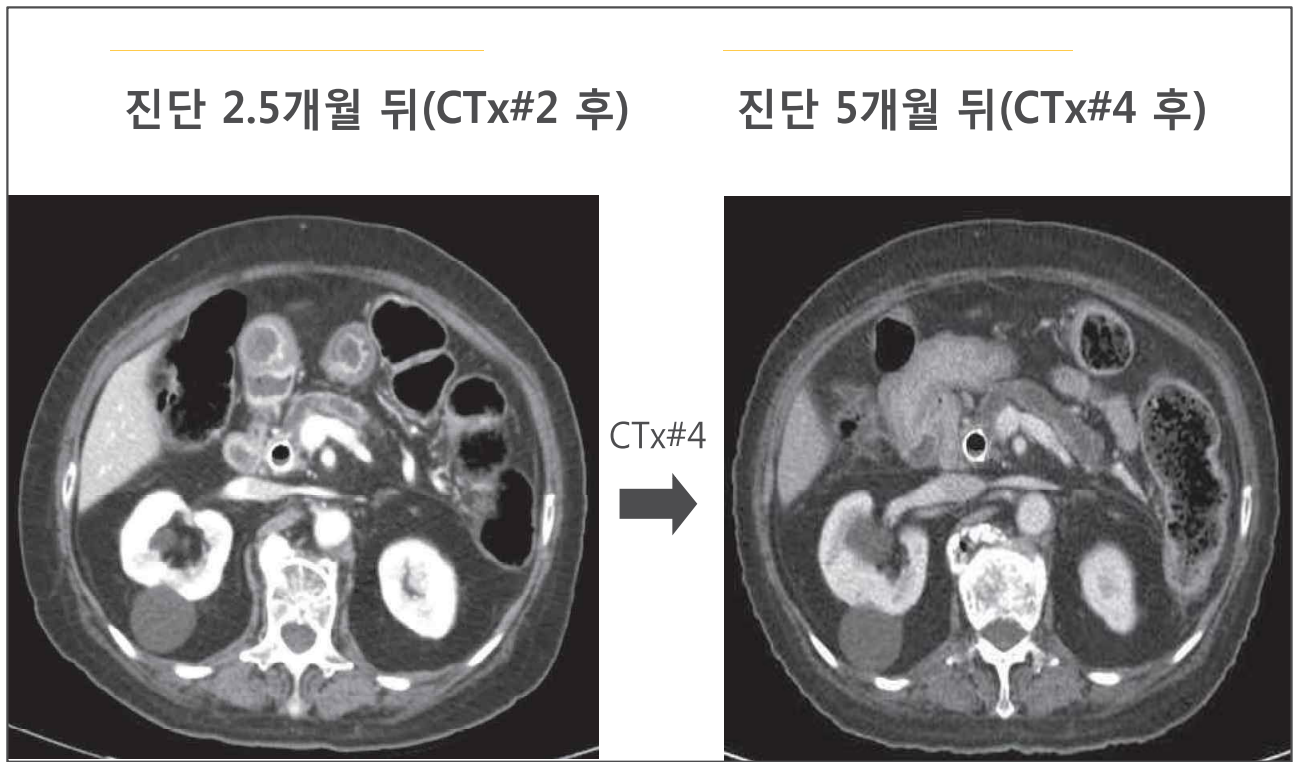
진단 2.5개월 뒤(CTx#2 후)

진단 5개월 뒤(CTx#4 후)



CTx#4
➡





Progression note

Chemotherapy record: TS-1 40mg bid (orally for 28 days, followed by a 14-day rest)

차수	일자
#1	2018. 2. 8~3. 13 (4 wks)
#2	2018. 3. 27~4. 24 (4 wks)

→ CA19-9 43.15, CEA 6.34

→ CA19-9 22, CEA 13.1

차수	일자
#3	2018. 5. 8~6. 5 (4 wks)
#4	2018. 6. 19~7. 17 (4 wks)

→ CA19-9 43, CEA 12

Progression note

Response 평가

#1. Pancreatic cancer s/p TS-1 (#4) → SD

Next Plan?

- #1. Keep TS-1
- #2. Change to gem
- #3. SBRT
- #4. CTx off (BSC)

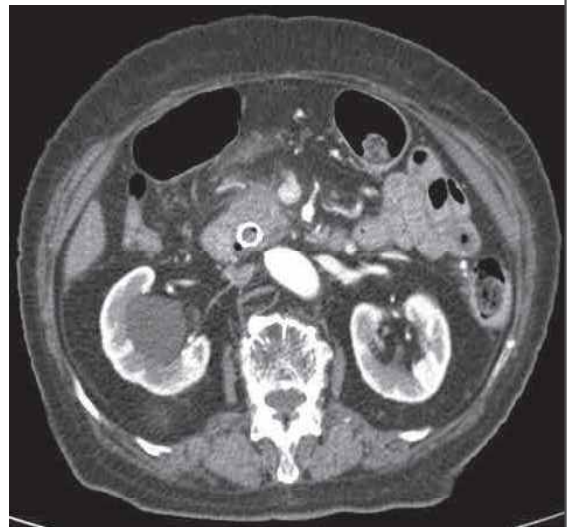
진단 5개월 뒤(CTx#4 후)



SBRT 5fx.



진단 6개월 뒤(SBRT 후)



Case Summary

Assessment: Pancreatic cancer s/p TS-1 (#4) → SD

s/p SBRT (5fx. ~ 2018/08/20) → SD

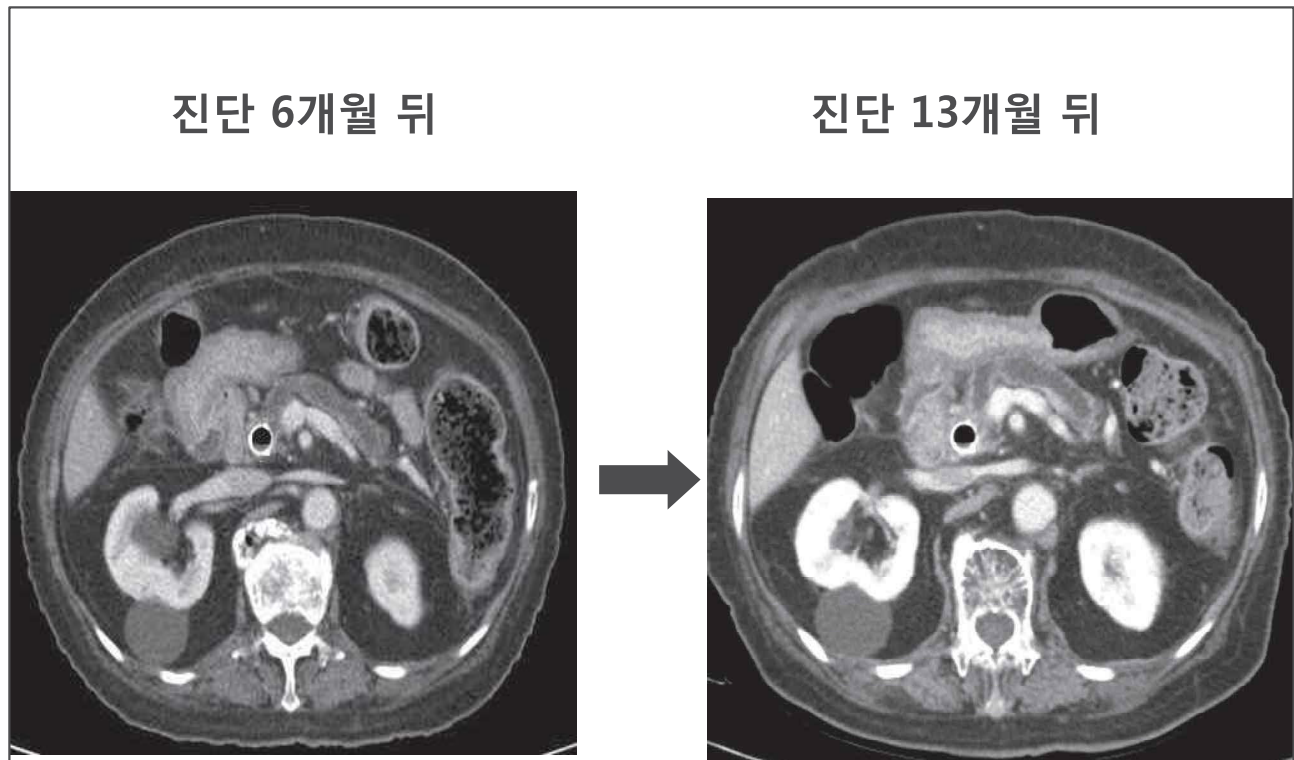
Plan: Conservative therapy

진단 6개월 뒤



진단 13개월 뒤





Management of Pancreatic Cancer in the Elderly

- Advancing age is a high risk factor for pancreatic cancer
- Many older patients are **not recommended** for surgery or chemotherapy
(poor outcomes d/t the less aggressive treatment of elderly patients)
- Unfortunately, very little data are available regarding the management of these patients

Management of PCA in the Elderly

- Chronological age ≠ Biological age
- International Society of Geriatric Oncology (SIOG) : **CGA (comprehensive geriatric assessment)**
- Older cancer patients is heterogeneous group
 - Biological, functional and psychosocial characteristics
 - Pharmacokinetic and pharmacodynamics
 - Polypharmacy
 - Performance status
 - Comorbidities and organ dysfunction

Parameter assessed	Elements and tools of the assessment
Demographic and social status	Questions on living situation, marital status, educational level, safety of the environment, financial resources, caregiver burden
Functional status	Performance status index ADLs IADLs Barthel index Pepper assessment tool for disability Visual and/or hearing impairment, regardless of use of glasses or hearing aid Mobility problem (requiring help or use of walking aid) Timed Get Up and Go One-leg standing balance test Walking problems, gait assessment, and gait speed Karnofsky health care professional-rated performance rating scale
Comorbidity	Charlson comorbidity index CIRS No. of comorbid conditions Summary of comorbidities NYHA
Cognition	Mini Mental State Examination Informant Questionnaire on Cognitive Decline in the Elderly Modified Mini Mental State Examination Clock-drawing test Blessed Orientation-Memory-Concentration
Emotional conditions (Depression)	Geriatric Depression Scale Hospital Anxiety and Depression Scale Mental health index Presence of depression (as a geriatric syndrome)
Nutrition	Weight loss (unintentional loss in 3 or 6 mo) Mini Nutritional Assessment Short Nutritional DETERMINE Nutritional Index
Polypharmacy	Number of medications Appropriateness of medications Risk of drug interactions
Geriatric syndromes	Dementia Delirium Depression

Pancreatic Cancer with Poor PS or in Elderly Patients

ORIGINAL REPORTS | Gastrointestinal Cancer

Phase I/II Trial to Evaluate the Efficacy and Safety of Nanoparticle Albumin-Bound Paclitaxel in Combination With Gemcitabine in Patients With Pancreatic Cancer and

PURPOSE Gemcitabine plus nanoparticle albumin-bound (NAB) paclitaxel (GA) significantly improved survival compared with gemcitabine alone in patients with metastatic pancreatic ductal adenocarcinoma (PDAC) and a Karnofsky performance status (PS) of 70% or greater. Because of the low number of patients with reduced PS, the efficacy of this regimen in fragile patients remains unclear. This study aimed to evaluate the efficacy and tolerability of different GA dosing regimens in patients with a poor PS.

PATIENTS AND METHODS In the phase I part of this study, patients were randomly assigned to one of the following four parallel GA treatment arms (six patients per arm): a biweekly schedule of NAB-paclitaxel (150 mg/m² [arm A] or 125 mg/m² [arm C]) plus gemcitabine 1,000 mg/m² or a standard schedule of 3 weeks on and 1 week off of NAB-paclitaxel (100 mg/m² [arm B] or 125 mg/m² [arm D]) plus gemcitabine 1,000 mg/m². The two regimens with the better tolerability profile on the basis of predefined criteria were evaluated in the phase II part of the study, the primary end point of which was 6-month actuarial survival.

RESULTS Arms B and D were selected for the phase II part of the study. A total of 221 patients (111 patients in arm B and 110 patients in arm D) were enrolled. Baseline characteristics including median age (71 and 68 years in arms B and D, respectively), sex (51% and 55% men in arms B and D, respectively), and metastatic disease (88% and 84% in arms B and D, respectively) were comparable between arms. The most frequent grade 3 or 4 toxicities in arms B and D were anemia (12% and 7%, respectively), neutropenia (32% and 30%, respectively), thrombocytopenia (7% and 11%, respectively), asthenia (14% and 16%, respectively), and neurotoxicity (11% and 16%, respectively). In arms B and D, there were no significant differences in response rate (24% and 28%, respectively), median progression-free survival (5.7 and 6.7 months, respectively), and 6-month overall survival (63% and 69%, respectively).

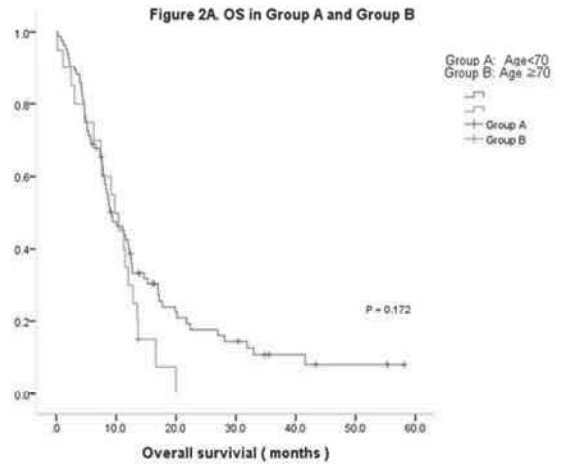
CONCLUSION NAB-paclitaxel administered at either 100 and 125 mg/m² in combination with gemcitabine on days 1, 8, and 15 every 28 days is well tolerated and results in acceptable safety and efficacy in patients with metastatic pancreatic ductal adenocarcinoma and a poor PS.

Pancreatic Cancer with Poor PS or in Elderly Patients

Efficacy and Safety of FOLFIRINOX in Elderly Patients with Advanced Pancreatic Adenocarcinoma

- Retrospectively reviewed (SNUBH)
- A first-line FOLFIRINOX from 2012 to 2017
- N=213
- Group A (age<70) vs. elderly group B (age≥70)

Baseline characteristics	Group A [‡] Age<70 [‡] (N=176) [‡]	Group B [‡] Age≥70 [‡] (N=38) [‡]	Total (N=214) [‡]	P-value [‡]
Age(Median, min-max) [‡]	61 years old (29-80) [‡]			[‡]
Sex [‡]				0.361 [‡]
Male [‡]	109(61.9%) [‡]	20(52.6%) [‡]	129(60.3%) [‡]	[‡]
Female [‡]	65(38.1%) [‡]	18(47.4%) [‡]	83(39.7%) [‡]	[‡]
ECOG [‡]				0.815 [‡]
0 [‡]	34(19.3%) [‡]	9(23.7%) [‡]	42(20.1%) [‡]	[‡]
1 [‡]	129(73.3%) [‡]	26(68.4%) [‡]	155(72.4%) [‡]	[‡]
2~ [‡]	13(7.4%) [‡]	3(7.9%) [‡]	16(7.5%) [‡]	[‡]



MEMO

MEMO