

Session III

Gastric Cancer Recurrence in 12 Years after Surgical Resection

Do Hyeong Lee, Jae Hyun Kim, Seun Ja Park, Moo In Park

*Department of Gastroenterology, Kosin University College of Medicine, Busan, Korea***1. Case presentation**

2018. 7월 constipation과 fecal incontinence를 주소로 내원한 51세 남자 환자

2005. 8월 20일 타병원에서 시행한 위내시경에서 위체부 소만의 AGC (Borrmann type 3) 진단되어 radical subtotal gastrectomy with Roux en Y를 받았고, stage 3 (T3N1M0, 림프절 전이:5/25), 조직 검사에서 signet-ring cell carcinoma 포함된 poorly differentiated adenocarcinoma 확인. 수술 후 9개월간 5-FU, cisplatin CTx 시행. 이후 3년간 본원 EGD, CT F/U 하였으며, recurrence 소견은 없음.

2017. 4월 20일 타병원 건강검진으로 시행한 CFS상 T-colon mass 및 stricture 동반되어 본원 내원
본원 evaluation에서 colon biopsy 결과 signet-ring cell carcinoma 확인되었고, 12년 전 절제한 gastric cancer 조직과 면역 염색결과 일치소견 보여 위암의 대장으로의 전이 병변 가능성이 높은 것으로 확인됨.

Extended right hemicolectomy 시행 및 FOLFOX CTx. 시행(2017.5.15-2017.10.20)

2018. 4월 20일 F/U CT, PET-CT에서 recurrence 소견 없음.

2018. 6월 08일 Constipation, rectal incontinence 증상으로 본원 소화기내과 외래 방문.

CFS에서 rectal shelf 소견 및 EGD에서 remnant stomach의 cancer recurrence 소견 동반
Colostomy op 및 Palliative CTx: ramucirumab + paclitaxel 시행

2. Diagnosis

- Recurrent stomach cancer with Metastatic rectal cancer with cancer peritonei

3. Therapy and Clinical course

- Colostomy op.
- Palliative 2nd CTx: ramucirumab + paclitaxel

4. Conclusion

- Recent reports from Korea and Japan have shown a late recurrence rate of about 6% among patients with advanced gastric cancer who survived >5 years post-gastrectomy.
- Several reports have suggested that surgery for selected patients with recurrent gastric tumors is worthwhile, due to the potential survival benefit from surgical intervention.
- When resection is to be performed, careful consideration of the surgical margin is needed due to the likelihood of lymph node metastases and the intramuscular spread of tumor cells.

Key word: Stomach cancer, Recurrent remnant stomach cancer, Metastatic rectal cancer

REFERENCE

1. Int J Surg Case Rep. 2014;5(12):954-957

Patient information

- Sex/Age: M/51
- C.C : Constipation, Fecal incontinence
- DM / HTN / Tbc / Hepatitis (- / - / - / -)
- Drug side effect / Allergy (- / -)
- Social Hx.
 - Smoking : 13년 전 금연, 18 pack*year
 - Alcohol : 맥주1-2병, 3회/주
- Family Hx.: 간암(형제)

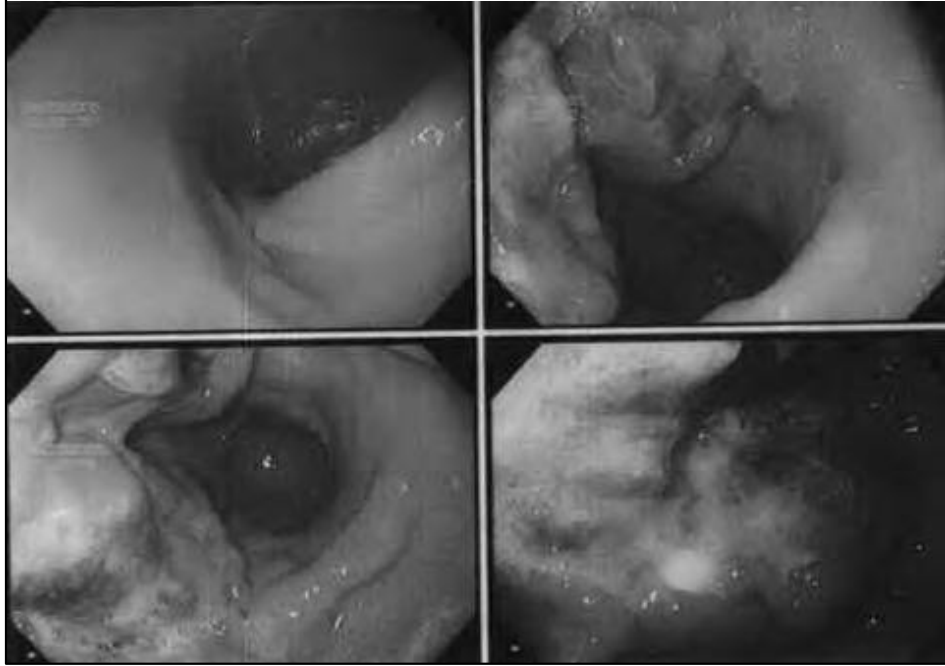


Present Illness

- 2005. 8. 20 타병원에서 시행한 위내시경에서 위체부 소만의 AGC (Borrmann type 3) 진단되어 본원 GS 내원



2005.08 EGD



Present Illness

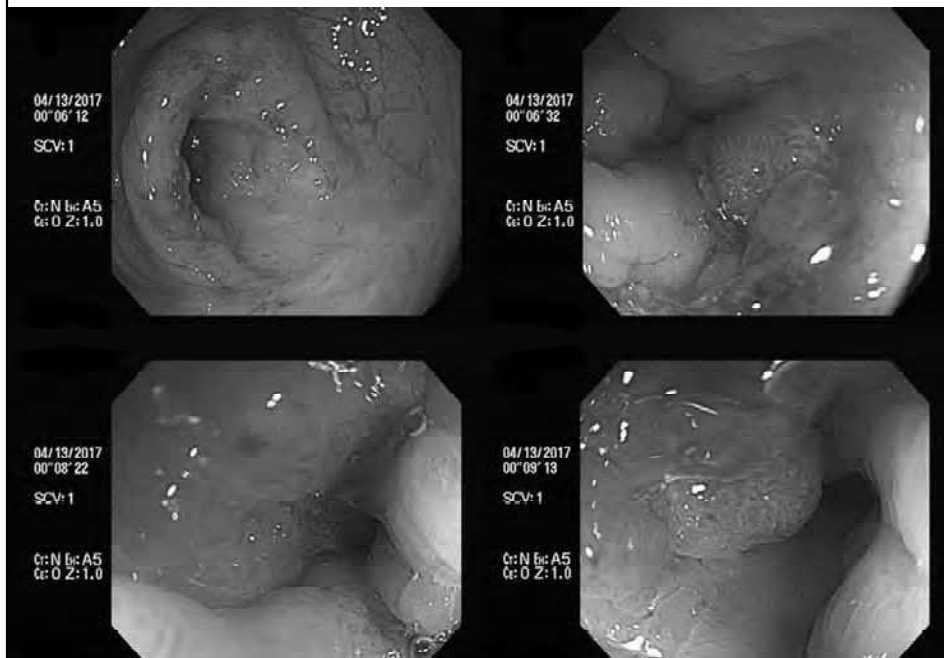
- 본원 GS에서 radical subtotal gastrectomy with Roux en Y을 받았고 stage 3 (T3N1M0, 림프절 전이: 5/25), 조직검사에서 signet-ring cell carcinoma 포함된 poorly differentiated adenocarcinoma 확인
- 수술 후 9개월간 5-FU, cisplatin CTx 시행
- 3년간 본원 EGD, CT F/U 하였으며, recurrence 소견없어 연고지 근처 병원에서 F/U 시행

Present Illness

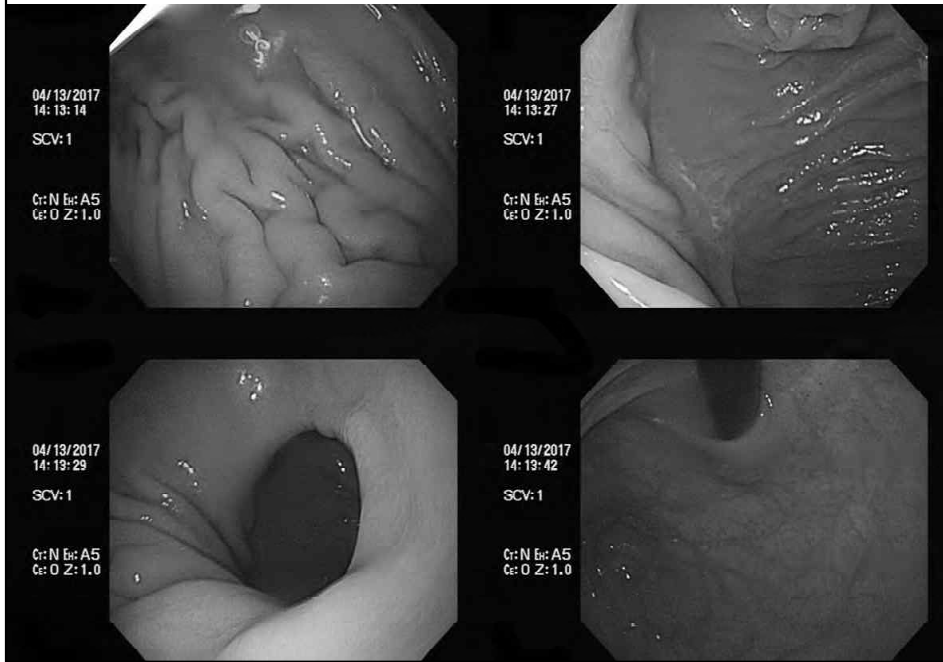
- 2017.3.27 타병원 검진 colonoscopy 에서 transverse colon 협착 및 점막의 취약성 관찰되어 further evaluation 위해 전원



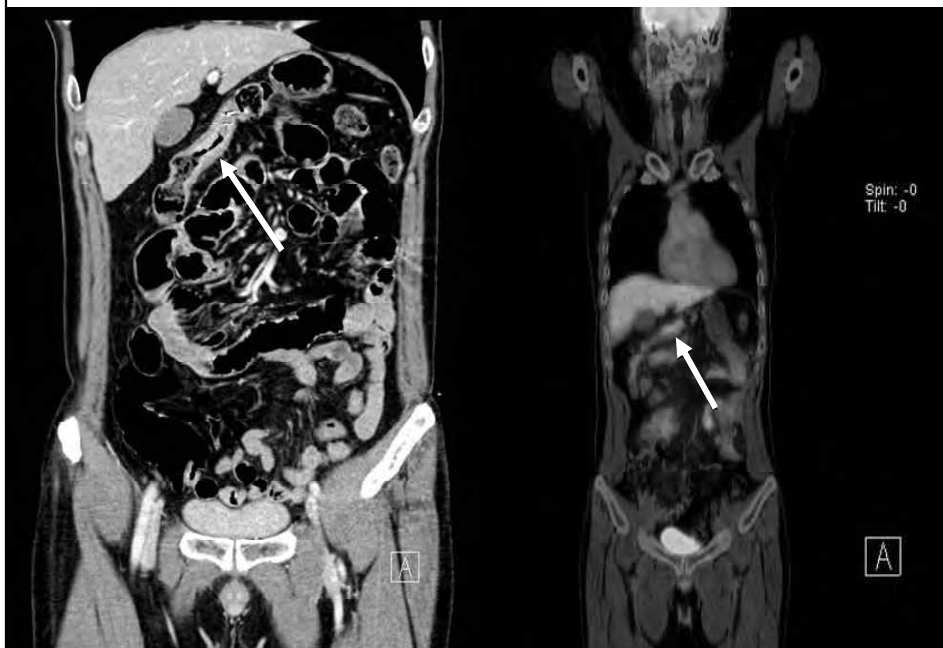
2017.04.13 Colonoscopy



2017.04.13 EGD

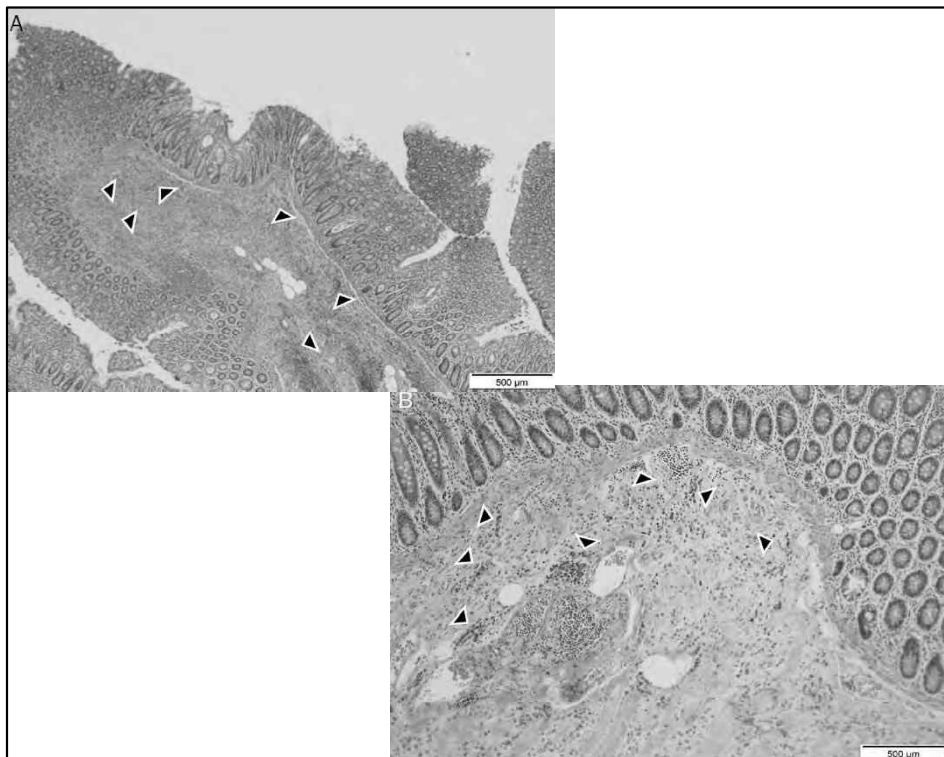


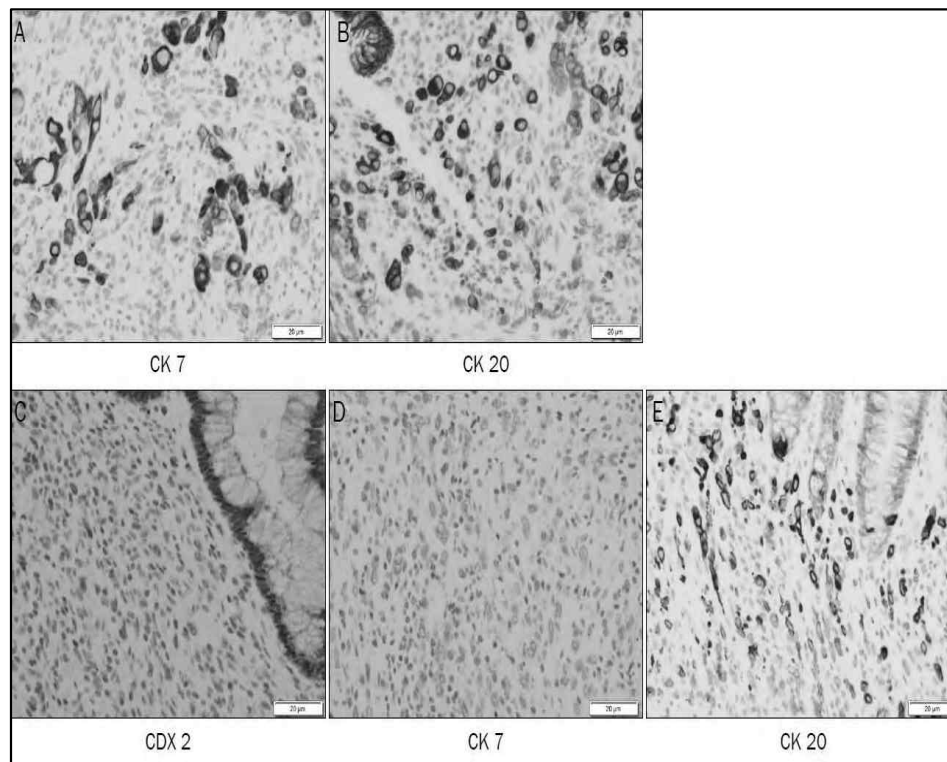
Abdomen CT / PET-CT



Present Illness

- Biopsy 결과 signet-ring cell carcinoma 진단되어 extended right hemicolectomy 시행(2017.4.20)

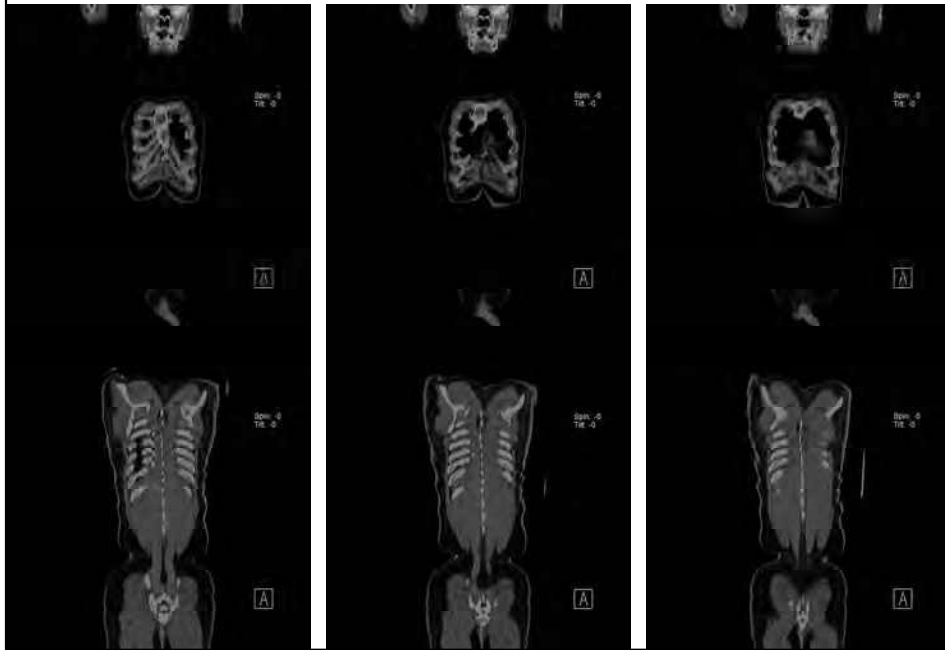




- 12년 전 위암 조직과 대장암 조직의 면역 염색 결과가 일치하여 전이성 병변으로 확인되었으며, 이후 FOLFOX CTx 시행 (2017.5.15-2017.10.20)

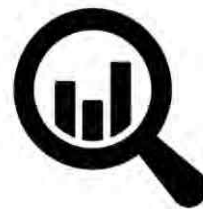


2018.04.20 PET-CT

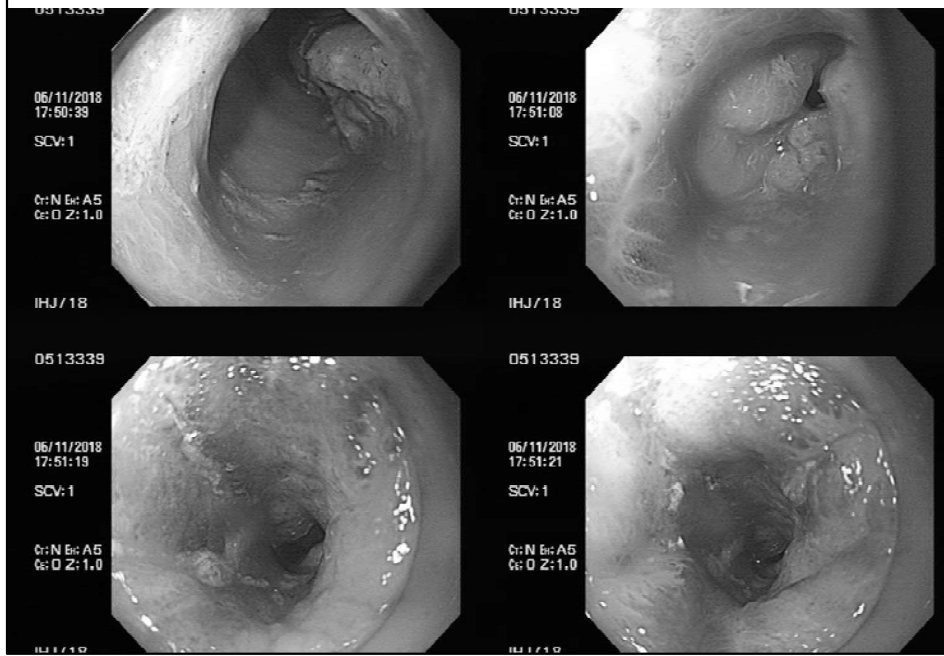


Present Illness

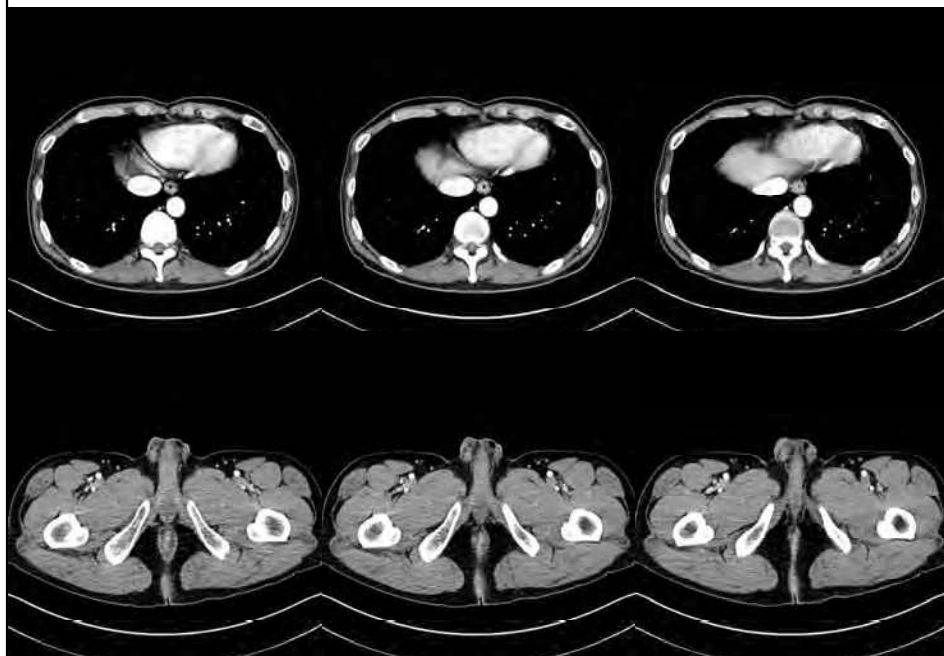
- 2018.4.20 f/u CT, PET-CT에서 recurrence 소견 없이 지내다가 2018.6.8 constipation, rectal incontinence 증상으로 내원.



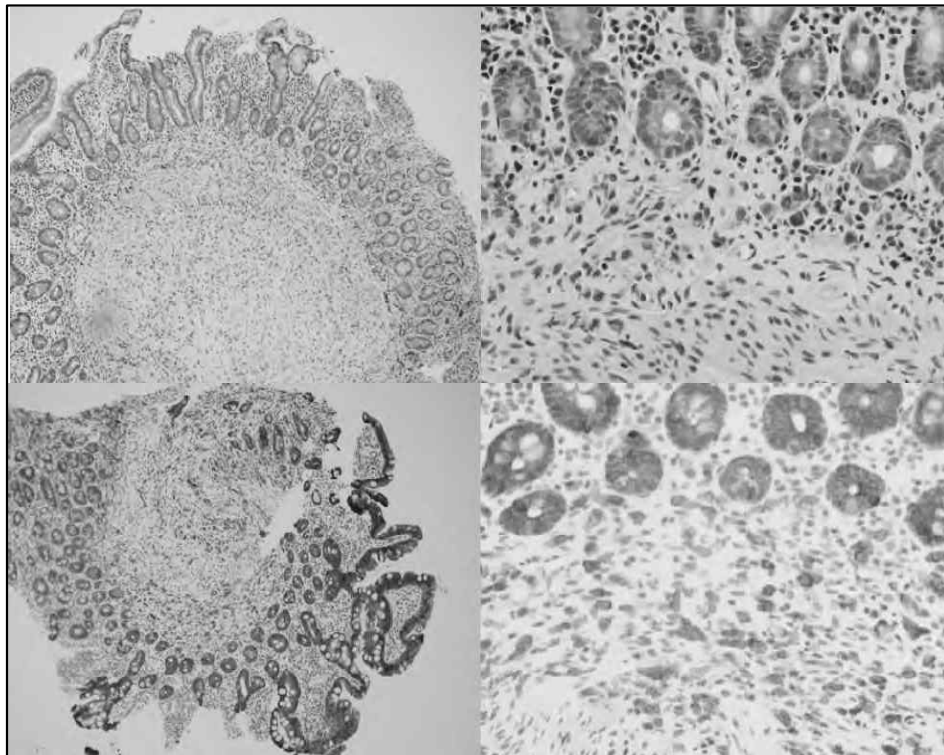
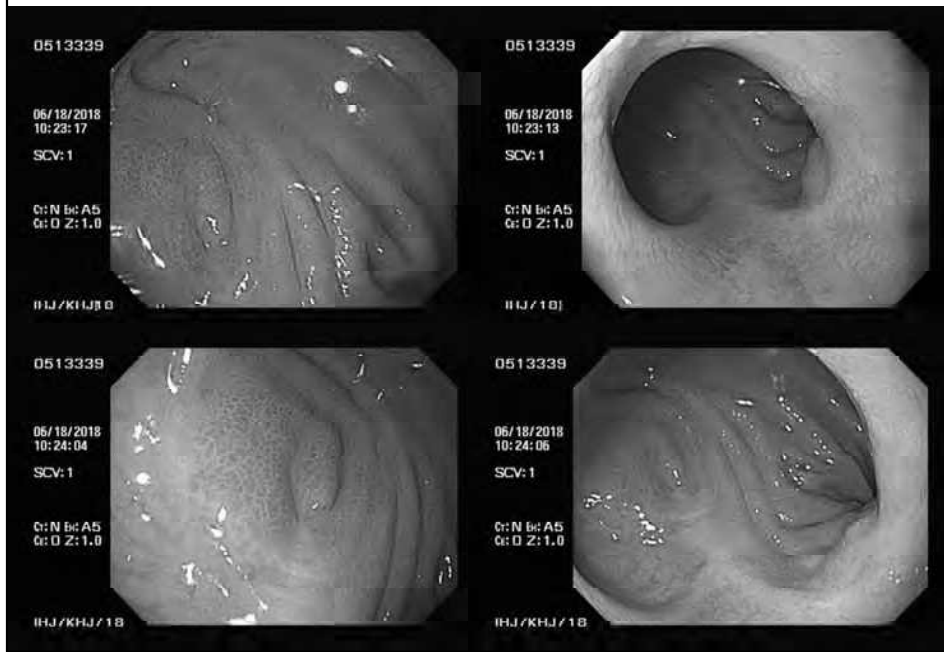
2018.06.11 Sigmoidoscopy



2018.06.14 Abdomen CT



2018.06.18 EGD



Diagnosis

- Recurrent stomach cancer
- Metastatic rectal cancer with cancer peritonei

Clinical course

- 2018.6.25
 - Colostomy op. 시행
- CTx
 - Palliative 2nd CTx : ramucirumab + paclitaxel
- RTx



Review

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Surgical resection of colorectal recurrence of gastric cancer more than 5 years after primary resection

Takehiro Noji^{a,b,*}, Yoshiyuki Yamamura^{a,1}, Jun Muto^{a,1}, Aki Kuroda^{a,1},
Junkichi Koinuma^{a,1}, Tatsuya Yoshioka^{a,1}, Katsuhiko Murakawa^{a,1}, Setsuyuki Otake^{a,1},
Satoshi Hirano^{b,2}, Koichi Ono^{a,1}

^a Department of Surgery, Ohihiro Kosei General Hospital, 1-7-58, Ohihiro City, Hokkaido 080-0016, Japan

^b Department of Gastroenterological Surgery II, Graduate School of Medicine, Hokkaido University, 1-15-1, Kita-ku, Sapporo, Hokkaido 060-8638, Japan

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ABSTRACT

INTRODUCTION: Intestinal metastasis from gastric cancer is rare, although the most common cause of secondary neoplastic infiltration of the colon is gastric cancer. However, little data is available on recurrence or death in patients with gastric cancer surviving >5 years post-gastrectomy. Here we report two cases of lower intestinal metastasis from gastric cancer >5 years after primary resection and discuss with reference to the literature.

PRESENTATION OF CASE: Case 1: A 61-year-old man with a history of total gastrectomy for gastric cancer 9 years earlier was referred to our hospital with constipation and abdominal distention. We diagnosed primary colon cancer and subsequently performed extended left hemicolectomy. Histological examination revealed poorly differentiated adenocarcinoma resembling the gastric tumor he had 9 years earlier. The patient refused postoperative adjuvant chemotherapy and remained alive with cancerous peritonitis and skin metastases as of 17 months later. Case 2: A 46-year-old woman with a history of total gastrectomy for gastric cancer 9 years earlier presented with constipation. She also had a history of Krusenber tumor 3 years earlier. We diagnosed metastatic rectal cancer and subsequently performed low anterior resection and hysterectomy. Pathological examination revealed poorly differentiated tubular adenocarcinoma, resembling the gastric tumor. The patient remained alive without recurrence as of 17 months later.

DISCUSSION: We found 19 reported cases of patients with resection of colon metastases from gastric cancer. Median disease-free interval was 74 months.

CONCLUSION: Resection of late-onset colorectal recurrence from gastric cancer appears worthwhile for selected patients.

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Introduction

- Most common cause of secondary neoplastic infiltration of the colon is gastric cancer
- Intestinal metastasis from gastric cancer is rare



Case report 1

- 52세 남자 환자 gastric cancer 진단 후 radical total gastrectomy 시행
- T3N0M0, poorly differentiated adenocarcinoma involving signet-ring cell carcinoma 진단 받았으며, 이후 5년간 f/u
- 61세 constipation, abdominal distention, lower abdominal pain으로 내원
- Descending colon cancer 진단 후 left hemicolectomy and transverse colectomy with mesenteric lymph node dissection 시행
- 조직검사에서 9년 전 위암조직과 비슷한 poorly differentiated adenocarcinoma 진단

Case report 2

- 37세 여자 환자 gastric cancer 진단 후 radical total gastrectomy 시행
- T3N2M0, signet-ring cell carcinoma 진단
- Adjuvant CTx 시행 후 5년간 f/u
- 43세 때 ovarian tumor 진단되어 ovariectomy 시행 -> Krukenberg tumor 진단
- 46세 constipation, abdominal distention으로 내원하여 rectum, uterus tumor invasion 진단
 - 조직검사에서 9년 전 위암조직과 비슷한 poorly differentiated adenocarcinoma 진단
 - LAR, hysterectomy 시행, mesenteric LN invasion 확인되어 CTx 시행

Discussion

- Recent reports from Korea and Japan have shown a late recurrence rate of about 6% among patients with advanced gastric cancer who survived >5 years post-gastrectomy.



Discussion

Table 1
Literature reports of late onset colorectal recurrence of gastric cancer >5 years after primary resection.

Year	Author	Age	Gender	Recurrent lesion	LN ^a	Primary tumor	DFI (month)	Outcome
1988	Okabe ⁴	49	F	C, A	Unknown	Por	60	Unknown
1988	Ohta ¹	57	M	C	Yes	Por	68	42M died
	Ohta	51	F	A, T, D, S	Yes	Por	69	22M died
	Ohta	44	F	R	Yes	Por	106	27M died ^b
1991	Yamada ¹	61	M	T	Unknown	Por	64	3M alive
1994	Ogiwara ²	52	F	D	Yes	Por	60	Unknown
2001	Man-i ¹⁷⁾	58	M	T, D, S, R	Yes	Sig	84	10M alive
2001	Kim ¹	75	M	T	Unknown	Well	77	26M alive
	Kim	70	M	C	Unknown	Well	68	44M alive
2001	Hise ¹⁸⁾	44	F	T	Unknown	Por, Sig	58	Unknown
2006	Hiraki ¹⁹⁾	68	F	A	Yes	Por, Sig	60	7M alive
2008	Shiokawa ¹	69	F	T	Yes	Por	156	4M alive
2009	Takahashi ¹⁴⁾	76	M	R	Unknown	Por	66	6M alive
2010	Iwakawa ¹⁵⁾	75	F	R	Yes	Por	83	25M died
	Iwakawa	76	F	R	Yes	Por	82	22M died
2011	Arai ¹⁶⁾	62	M	A, D, R	Unknown	Por, Mode	180	Unknown ^c
2011	Murakami ¹⁵⁾	60	M	I	Unknown	Mode, Por	72	2M alive
2012	Watanabe ²	58	M	T	Unknown	Por, Sig	77	27M died
2013	Yamamura ⁴	79	M	T	Yes	Por, Sig	132	19M died
-	Our Case 1	61	M	T, D, S	Yes	Por, Mode	110	17M alive
-	Our Case 2	46	F	R	Yes	Por	106	24M alive

LN^a: lymph node metastasis; DFI: disease free interval; Gender (M/F: male/female); C: cecum; A: ascending colon; T: transverse colon; D: descending colon; S: sigmoid colon; R: rectum; Por: poorly differentiated adenocarcinoma; Sig: signet ring cell adenocarcinoma; Mode: moderately differentiated adenocarcinoma; Well: well-differentiated adenocarcinoma; M: month.

^a This patient was not resected; the only treatment was chemotherapy.

- Median disease-free interval was 74 months.
- Most frequent site of metastasis was the transverse colon
- Majority of metastatic cases originated from poorly differentiated carcinoma
- Median survival from surgery for metastatic lesions was 26 months, and 2 cases survived >3 years.

Discussion

- Several reports have suggested that surgery for selected patients with recurrent gastric tumors is worthwhile, due to the potential survival benefit from surgical intervention.
- When resection is to be performed, careful consideration of the surgical margin is needed due to the likelihood of lymph node metastases and the intramuscular spread of tumor cells.

NCCN GUIDELINE - Follow-up	
<p>Tis (successfully treated by ER)^w</p>	<ul style="list-style-type: none"> • H&P every 3–6 mo for 1–2 y, every 6–12 mo for 3–5 y, and annually thereafter • CBC and chemistry profile as clinically indicated • Upper GI endoscopy (EGD) every 6 mo for 1 y, then annually for 3 y • Routine imaging (CT chest/abdomen/pelvis with oral and IV contrast) as clinically indicated based on symptoms and concern for recurrence
<p>p stage I (T1a, T1b, N0–1 treated by surgical resection or T1a treated by ER)^w</p>	<ul style="list-style-type: none"> • H&P every 3–6 mo for 1–2 y, every 6–12 mo for 3–5 y, and annually thereafter • CBC and chemistry profile as clinically indicated • For patients treated by ER, EGD every 6 mo for 1 y, then annually for up to 5 years <ul style="list-style-type: none"> • Thereafter, as needed based on symptoms and/or radiographic findings • For patients treated by surgical resection, EGD as clinically indicated • CT chest/abdomen/pelvis with oral and IV contrast as clinically indicated^y • Monitor for nutritional deficiency (eg, B₁₂ and iron) in surgically resected patients (especially after total gastrectomy) and treat as indicated
<p>p stage II/III or yp stage I–III (treated with neoadjuvant ± adjuvant therapy)^w</p>	<ul style="list-style-type: none"> • H&P every 3–6 mo for 1–2 y, every 6–12 mo for 3–5 y, and annually thereafter • CBC and chemistry profile as clinically indicated • For patients who had partial or subtotal gastrectomy, EGD as clinically indicated • CT chest/abdomen/pelvis with oral and IV contrast every 6–12 months for first 2 years, then annually up to 5 years^y and/or can consider PET/CT as clinically indicated • Monitor for nutritional deficiency (eg, B₁₂ and iron) in surgically resected patients (especially after total gastrectomy) and treat as indicated

Recurrence
(See GAST-8)
or
Survivorship^z

memo

MEMO