A Case of Palliative Chemotherapy of Advanced Colorectal Cancer with Multiple Hepatic Metastasis

Tae Kyun Kim, Hyun Yong Jeong, Hee Seok Moon, Jae Kyu Sung, Sun Hyung Kang

Department of Gastroenterology, Internal Medicine, Chungnam National University College of Medicine, Daejeon, Korea

We report a case of a 59-years-old women who diagnosed with advanced colorectal cancer, with review of the literature. A 59-year old women was visited our hospital to evaluate the cause of persistent abdominal pain. Colonoscopy showed a large fungating mass 20 cm from the anal verge that was suspected to be colorectal cancer. Colonoscopic biopsy was performed, and histology demonstrated adenocarcinoma, moderately differentiated. An abdominal computed tomography (CT) showed sigmoid colon cancer with multiple enlarged lymph nodes and numerous metastases in entire liver. Therefore, the patient received chemotherapy with FOLFOX. The patient has completed her ninth cycle of chemotherapy and after an abdominal CT response assessment showing partial remission. But, FOLFOX was discontinued due to peripheral neuropathy and the patient changed Xeloda only because he wanted oral medicines. After 4 years of continuous Xeloda chemotherapy, the liver metastases had disappeared and size of sigmoid cancer remarkably reduced. We report our experience of a case of colorectal cancer with liver metastasis that was successfully treated with Xeloda alone.

Key Words: Advanced colorectal cancer, Palliative chemotherapy, Capecitabine

MEMO

최 ○ 숙 (59/F) 01286654 외래초진일 : 2012.06.21

- Reason for visit

Abdominal discomfort with dyspepsia

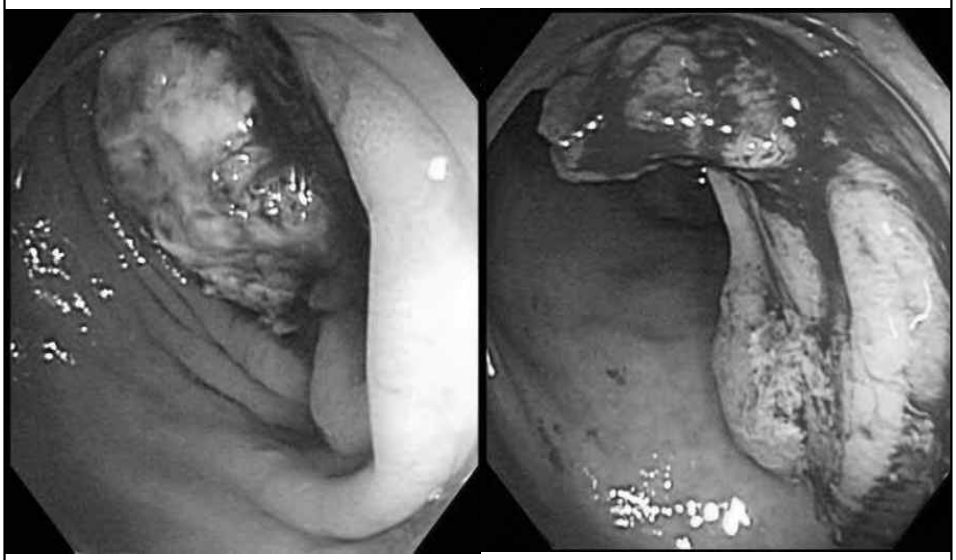
Brief history

12.6.21) 한달 전부터 복부 불편감, 소화불량 증상이 있어서
정밀검사 위하여 본원 내원

12.7.3) GFS: CAG C-II moderate degree

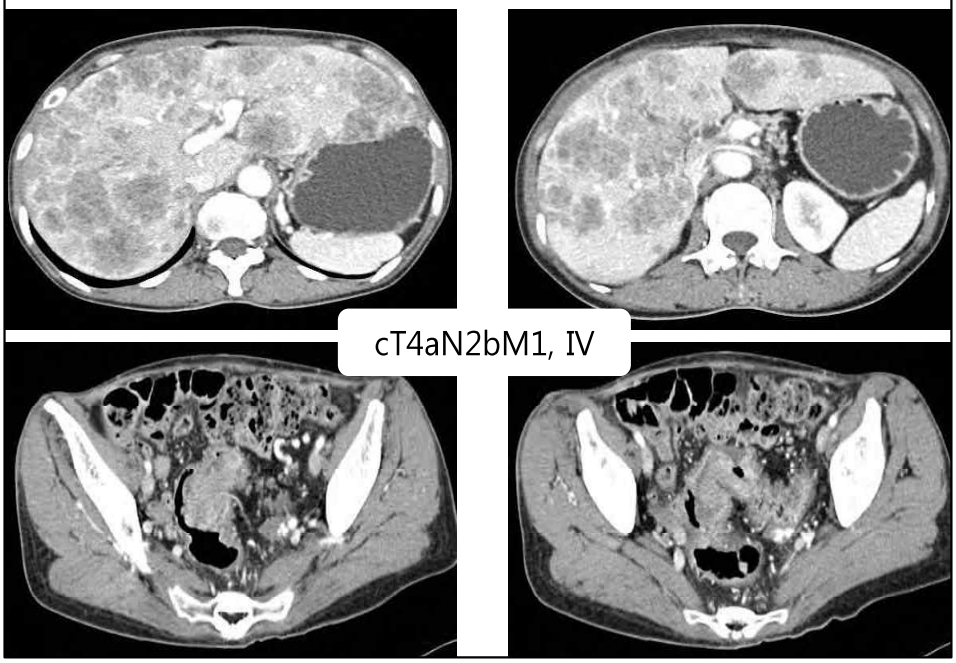
12.7.3) Sigmoidoscopy :
AV상방 20 cm 이상 내시경 통과 불가능

Sigmoidoscopy (2012.07.03)

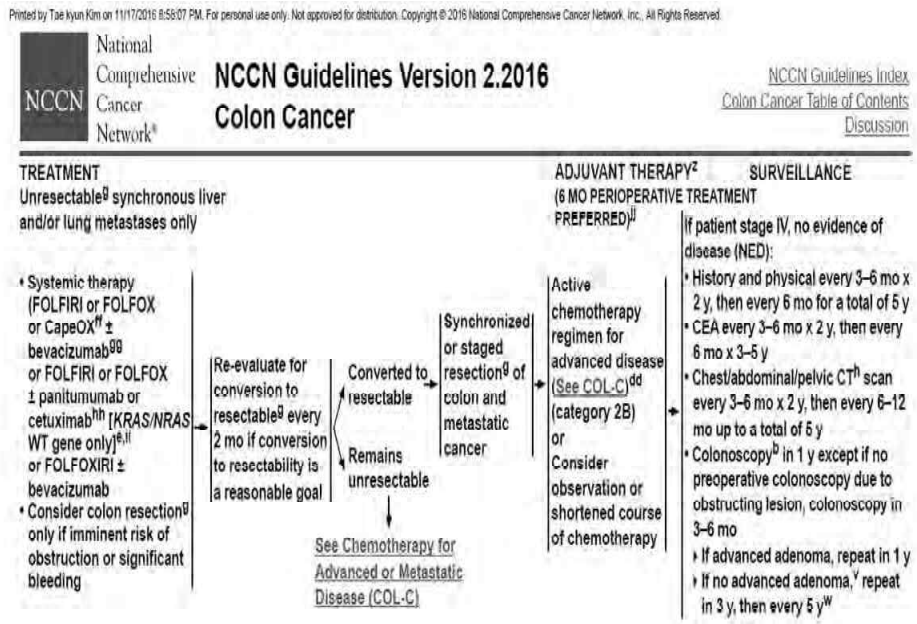


Rectosigmoid Colon Cancer
※ Bx.: Adenocarcinoma, moderate differentiated

A-P CT (2012.07.10)



Brief history



Brief history

(12.07.17-12.11.29) #1-9. FOLFOX (q 2 wks)

Regimen	Dose	Duration
5-FU	2,400 mg/m^2	D1 (H2-48)
Oxaliplatin	100 mg/m^2	D1 (H0-2)
Leucovorin	100 mg/m^2	D1 (H0-2)

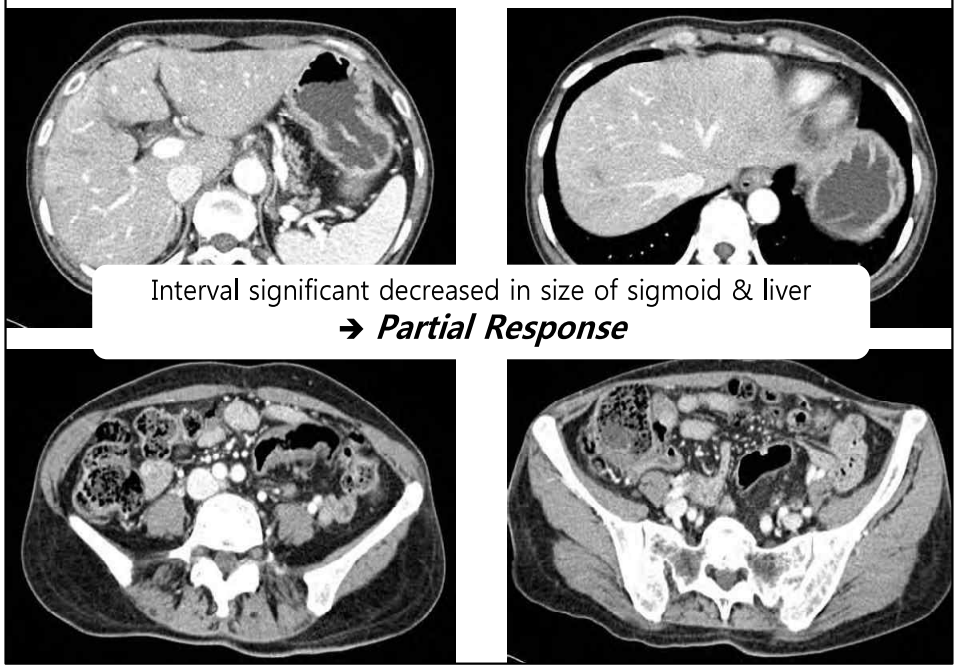
#1	#2	#3	#4	#5	#6	#7	#8	#9
12.7.17	12.8.3	12.8.18	12.9.4	12.9.20	12.10.5	12.10.23	12.11.9	12.11.27

12.08.29) APCT : PR

12. 10.16) APCT :PR

12.12.05) APCT : SD

A-P CT (2012.10.16)



Brief history

12.12.20) FOLFOX에 의한 손발 저림증상이 심하여

IV 항암제는 모두 거부함. (common toxicity criteria Grade 3-4)

Scale	NCI CTC Grading for Neuropathy
Grade 1	Asymptomatic, loss of deep tendon reflexes or paresthesia (including tingling) but not interfering with function
Grade 2	Sensory alteration or paresthesia (including tingling) interfering with function but not ADL
Grade 3	Sensory alteration or paresthesia interfering with ADL
Grade 4	Disabling

Brief history

12.12.22) Xeloda로 regimen change 하기로 함

Regimen	Dose	Duration
Capecitabine	1250mg/m^2	Bid (2 week)
2주간 투여 후 1주간 휴지기		

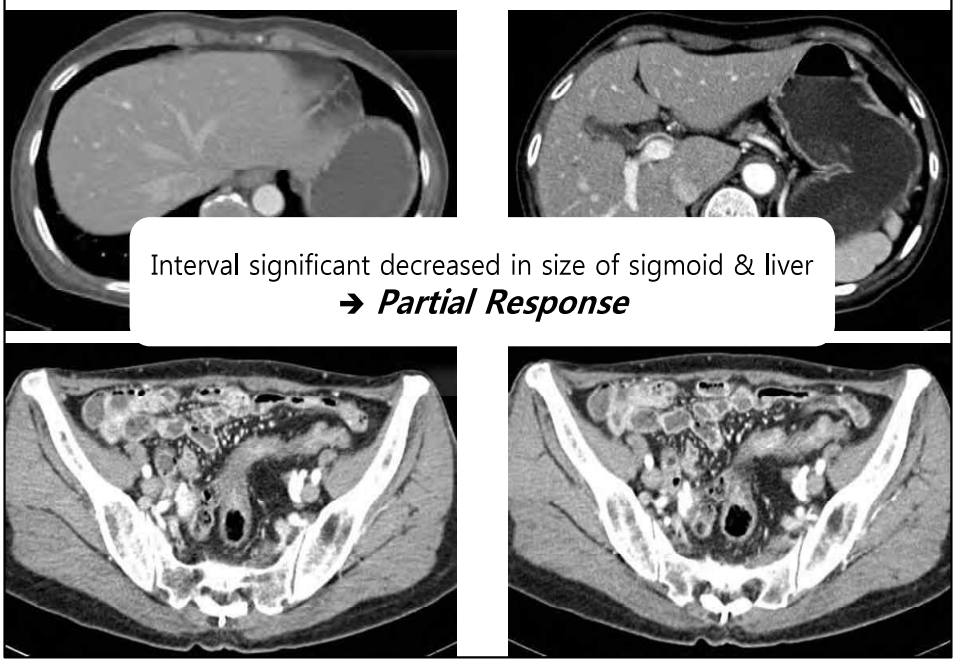
13.7.17) A-P CT f/u (#9. Xeloda 종료 후)

→ SD

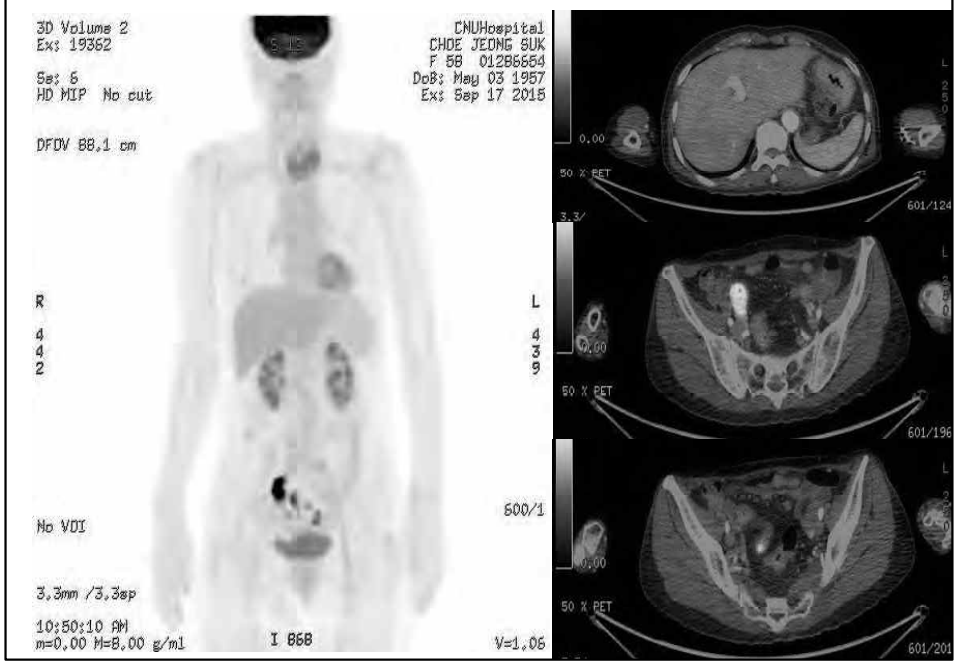
13.8.9) Hand-foot syndrome (WHO grade 1-2) 발생하여 용량을 감량함
(하루 3,500 mg → 3,000 mg)

15.7.7) A-P CT f/u (#36. Xeloda 종료 후)

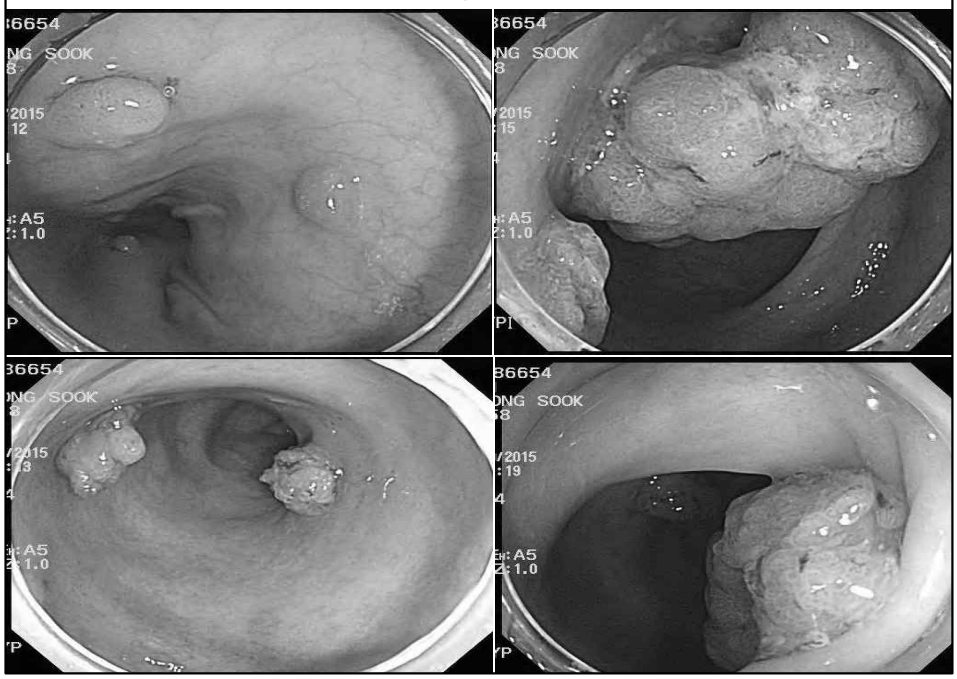
A-P CT (2015.07.07)



PET-CT (2015.09.17)



Colonoscopy (2015.10.20)



Familly history

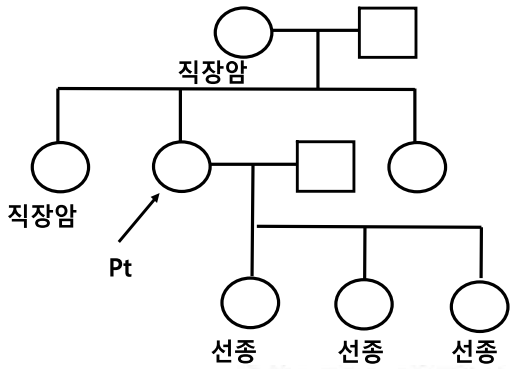


Table 2. Diagnosis of Hereditary Nonpolyposis Colorectal Cancer

Amsterdam criteria II
1. At least three family members with HNPCC-related cancer*, one of whom is first-degree relative of the other two.
2. At least two generations with HNPCC-related cancer.
3. At least one individual <50 y at diagnosis of HNPCC-related cancer.

Modified Amsterdam criteria
1. Two first-degree relatives with colorectal cancer involving two generations.
2. At least one case diagnosed before 55 y or
3. Two first-degree relatives with colorectal cancer and a third relative with endometrial cancer or another HNPCC-related cancer.

Abbreviations: HNPCC, Hereditary nonpolyposis colorectal cancer. *HNPCC-related cancer: colorectal, endometrial, small bowel, ureter, renal pelvis

Table 1. Causative Genes and Clinical Characteristics of Hereditary Colorectal Cancer

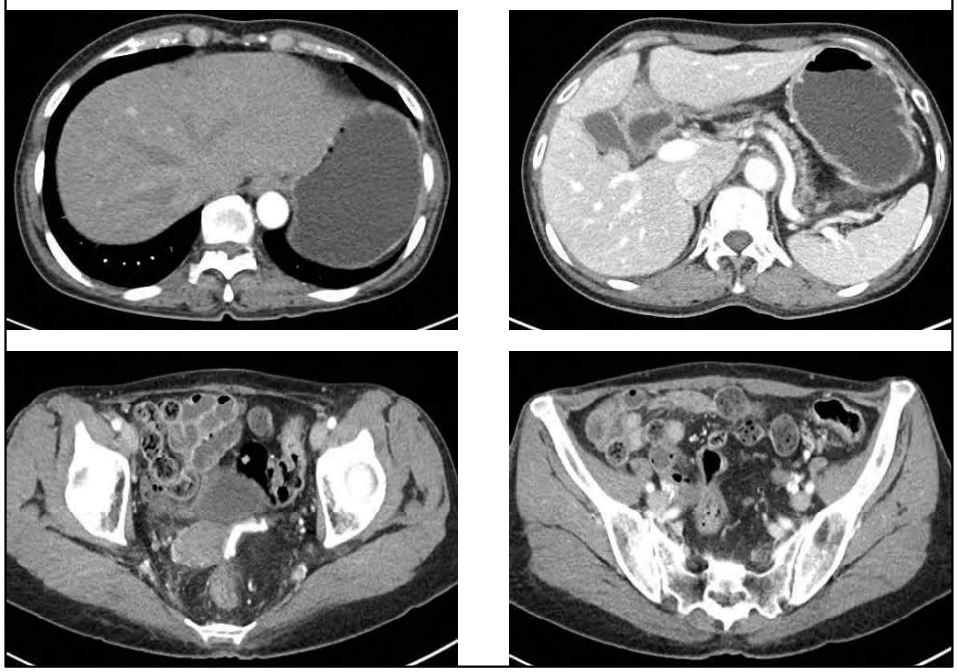
	HNPCC	FAP	Peutz-Jegher	Juvenile polyposis
Inheritance	AD	AD	AD	AD
Causative gene	*hMLH1, hMSH2, hMSH6, hPMS1, hPMS2, hMLH3*	*APC*	*STK11 (LKB1)*	*SMAD4, BMPR1A*
Gene location	3p21, 2p22, 2p16, 2q31, 7p22, 5q11	5q21	19p13	18q21, 10q22
Frequency in all CRCs	2-3%	1%	<0.1%	<0.1%
Location of polyps	Large bowel	Large bowel	Small bowel	Large bowel
Frequency of polyps	20-40%	100%	>90%	>90%
Number of polyps	1-10	>100	10-100	50-200
Cancer risk	80%	100%	5-20%	30-50%

Brief history

- 환자가 수술이나 IV 항암제 등 다른 치료 원하지 않고, Xeloda 치료만 강력하게 원하여 치료 지속하기로 함. (가족에 대한 검사도 거부함)

16.11.9) A-P CT f/u (#54. Xeloda 종료 후)

A-P CT (2016.11.09)



Summary

Colorectal cancer [cT4aN2bM1] IV

12.07.17-11.29)
#9. FOLFOX

Peripheral
Neuropathy

12.12.22-13.06.28)
#9. Xeloda

13.8.9) Hand-foot
Syndrome
3,500 mg → 3,000 mg

12.12.05) A-P CT : **PR**

13.7.17) A-P CT : **SD**

-15.6.12)
#36.Xeloda

15.9.17)
PET/CT

-16.10.12)
#54. Xeloda

15.7.7) A-P CT : **PR**

Known sigmoid colon cancer
그 외 scan된 부위에 hypermetabolic
lesion은 관찰되지 않음

16.11.09) A-P CT : **SD**

Chemotherapy in Metastatic Colorectal cancer

NCCN Guideline

: FOLFIRI or FOLFOX or Capecitabine ± Bevacizumab or

± Cetuximab (KRAS WT gene only)

Clinical Practice Patterns in Chemotherapeutic Treatment Regimens for Metastatic Colorectal Cancer

→ FOLFOX was the most common first-line and FOLFIRI the most common second- and third-line mCRC therapy.

Clinical Colorectal Cancer, Vol. 15, No. 2, 135-40 (2015)

Capecitabine (Xeloda) as Monotherapy

Table 1 Comparison of treatment efficacy as a monotherapy

Clinical trial	Type	Treatments	ORR	PFS (mo)	OS (mo)
Van Cutsem *et al*[12] (2001)	Phase III	Capecitabine *vs* 5-FU/LV	18.9% *vs* 15.0% (P = 0.013)	5.2 *vs* 4.7 (HR = 0.96, P = 0.65)	13.2 *vs* 12.1 (HR = 0.92, P = 0.33)
Hoff *et al*[11] (2001)	Phase III	Capecitabine *vs* 5-FU/LV	24.8% *vs* 15.5% (P = 0.005)	4.3 *vs* 4.7 (HR = 1.03, P = 0.72)	12.5 *vs* 13.3 (HR = 1, P = 0.97)
Van Cutsem *et al*[13] (2004)	Integrated Analysis (Phase III)	Capecitabine *vs* 5-FU/LV	26% *vs* 17% (P < 0.0002)	4.6 *vs* 4.7 (HR = 0.99, P = 0.95)	12.9 *vs* 12.8 (HR = 0.95, P = 0.48)

Capecitabine: 1250 mg/m^2 every 12 h (days 1-14), 3-wk regimen cycle; 5-FU/LV (Mayo clinic): 425 mg/m^2 5-FU bolus + LV 20 mg/m^2 (days 1-5), 4-wk regimen cycle. ORR: Overall response rate; PFS: Progression-free Survival; OS: Overall survival; HR: Hazard ratio; LV: Leucovorin.

Table 2 Comparison of treatment safety (Grade 3/4 events) as a monotherapy

Clinical trial	Treatments	Diarrhea	Neutropenia	Stomatitis	HFS
Van Cutsem *et al*[12] (2001)	Capecitabine *vs* 5-FU/LV	10.7% *vs* 10.4%	2.0% *vs* 19.8%[a]	1.3% *vs* 13.3%[a]	16.2% *vs* 0.3%[a]
Hoff *et al*[11] (2001)	Capecitabine *vs* 5-FU/LV	15.4% *vs* 13.9%	2.6% *vs* 25.9%[a]	3.0% *vs* 16.0%[a]	18.1% *vs* 0.7%[a]
Cassidy *et al*[14] (2002)	Capecitabine *vs* 5-FU/LV	13.1% *vs* 12.2%	2.3% *vs* 22.8%[a]	2.0% *vs* 14.7%[a]	17.1% *vs* 1%[a]

[a]P < 0.05 *vs* capecitabine group; HFS: Hand-foot syndrome; LV: Leucovorin.

World J Gastroenterol 2014 May 28;20(20):6092-6101

Capecitabine (Xeloda) as Monotherapy

Asia-Pacific Journal of Clinical Oncology
First Impact Factor released in June 2010 and now listed in MEDLINE!

Asia-Pacific Journal of Clinical Oncology 2011; 7: 82–87 doi:10.1111/j.1743-7563.2010.01363.x

ORIGINAL ARTICLE

Capecitabine monotherapy as salvage treatment after failure of chemotherapy containing oxaliplatin and irinotecan in patients with metastatic colorectal cancer

Seung T KIM, Yoon J CHOI, Kyong H PARK, Sang C OH, Jae H SEO, Sang W SHIN, Jun S KIM and Yeul H KIM

Divisions of Hematology-Oncology, Korea University School of Medicine, Korea University Medical Center, Seoul, South Korea

The capecitabine monotherapy had a moderate disease control rate and a tolerable toxicity profile as third-line or fourth-line treatment for metastatic CRC patients who were refractory to standard chemotherapy with no further treatment options.

Capecitabine (Xeloda) as Monotherapy

TABLE 2. Treatment Response

	n (%)	
Tumor Response	Arm A (Capecitabine) (n = 40)	Arm B (CAPOX) (n = 40)
Complete response	0 (0)	1 (2.5)
Partial response	9 (22.5)	13 (32.5)
Stable disease	23 (57.5)	22 (55.0)
Progressive disease	6 (15.0)	3 (7.5)
Not evaluable	2 (5.5)	1 (2.5)

The overall response rates were 22.5% (95% CI, 9.6%–35.4%) for arm A and 35.0% (95% CI, 20.2%–49.8%) for arm B with intent-to-treat analysis. There were no statistical differences in response rate ($P = 0.217$, HR 0.54, 95% CI 0.20–1.45) between the 2 groups.

Initial aggressive treatment strategy would not be recommended for this patient population because QoL appeared more preserved, treatments were better tolerated, and survivals did not differ in patients treated with initial capecitabine monotherapy

American Journal of Clinical Oncology Volume 36, Number 6, December 2013

Capecitabine (Xeloda) as Monotherapy

Cancer Chemother Pharmacol (2009) 63:549–553
DOI 10.1007/s00280-008-0766-y

SHORT COMMUNICATION

Pathologic complete response after palliative 3rd line chemotherapy with capecitabine alone in metastatic colorectal cancer

Hyeon Jin Cho · Su-Jung Kim · Sun Young Kim · Hye-Suk Han · Yong Sang Hong · Seong Hoon Kim · Seok-Byung Lim · Kyung Hae Jung · Hee Jin Chang · Eun Kyung Hong

Received: 21 February 2008 / Accepted: 26 April 2008 / Published online: 7 May 2008

Capecitabine alone as palliative 3rd line treatment did show clinical response in this patient, indeed, and she received 2nd liver metastasectomy which revealed pathologic complete response.

MEMO