



THE ROLE OF PALLIATIVE RADIATION THERAPY FOR PATIENTS WITH ADVANCED GASTRIC CANCER

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ABSTRACT

Palliative treatment for advanced gastric cancer bleeding and obstruction includes surgical treatment and endoscopic treatment. There are few reports on radiotherapy. Between April 2014 and March 2020, radiation therapy was performed for symptomatic relief in patients with unresectable advanced gastric cancer at our hospital. We investigated 11 patients who underwent the treatment. The purpose of treatment was to stop bleeding in 8 cases and to relieve stenosis in 4 cases. Hemostasis response rate was 63%, stenosis release response rate was 50%. The median duration of hemostatic response and median duration of stenotic response were 103 days and 52 days, respectively. median overall survival At 567 days, median survival after initiation of irradiation was 105 days. Radiotherapy for symptom relief is more effective than surgical or endoscopic treatment. Since it takes time to produce results, a certain degree of efficacy can be expected if the patient is selected.

KEYWORDS: Bleeding, Gastrointestinal stricture, Gastric cancer, Palliative radiotherapy.

INTRODUCTION

Indicated palliative local therapy for patients with advanced gastric cancer intervention, endoscopic therapy, surgery, and radiotherapy be. These cannot be controlled with usual drug therapy It is used for bleeding and stenotic symptoms. However the bleeding stopped with an endoscope. Bleeding is difficult, and surgery for stenosis and bleeding is invasive they are often shunned from the outside. Relaxation radiation in such cases Radiation therapy may be indicated. For local symptoms of advanced gastric cancer there have been several reports in the past on the effects of combined chemoradiotherapy for, but there are few reports of radiotherapy alone. Went to our hospital a report on radiotherapy alone for gastric cancer patients.

METHOD

From April 2014 to March 2020, we conducted clinical trials for patients with unresectable advanced gastric cancer. Radiation therapy is used to relieve symptoms such as bleeding and upper gastrointestinal stenosis. Of the 11 patients who received treatment alone (Without chemotherapy), I considered it. The symptoms targeted for intervention are bleeding from the primary lesion, Upper gastrointestinal stenosis was diagnosed. Bleeding symptoms should be reintroduced from the start of irradiation. The duration of hemostatic response was defined as the period until blood was required. Also,

reference a period of 3 months or more from the start of injection until the need for another blood transfusion or did not require a blood transfusion until death. Rice field. For cases in which oral intake is impossible due to upper gastrointestinal stenosis as a result, oral intake such as liquid food became possible from the day of the start of irradiation. The period until oral intake becomes impossible again is called the stenosis remission response period. The period during which oral intake is possible from the start of irradiation is 3 months or more. A response was defined as a condition in which death was possible. Radiation irradiation method should be determined based on endoscopic findings and CT findings. Set to include the site, exclude the regional lymph node region, and set the treatment plan I made a drawing. 10 MV-X rays are used as a basis to irradiate the front and back of the two gates facing each other. However, the target total dose was 30 Gy in 10 fractions. The dose and number of irradiations were determined based on the performance status (PS).

RESULT

A patient list is shown in Table 1. Male to female ratio 7:4, median age 69.0 years old, Eastern Cooperative Oncology Group (ECOG) PS was 3 in 1 case, There were 2 cases of 2, 7 cases of 1, and 1 case of 0. Histological type is undifferentiated type 8 cases, differentiated type 3 cases. The macroscopic type was

type 2 in 2 cases, type 3 in 3 cases, and type 4. was 6 cases. 5 cases in the vestibule, 4 cases in the body, and the vault was 2 cases. The clinical stage (UICC-7) was IV in 10 cases and IIIA in one patient, the site of metastasis was peritoneum in 8 cases, liver in 4 cases, and lung in 2 cases. rice field. Seven patients had two or more metastatic organs. To the last Ten patients were able to complete the treatment. The median cumulative radiation dose is At 40 Gy, the median number of fractions was 18 Fr. Radiotherapy Five patients received irinotecan-based regimen (CPT) as prior treatment. Three patients received a paclitaxel-based regimen (PTX). Rear Only 1 case was treated with PTX, and the remaining cases were treated with aggressive anticancer therapy.

did not. Surgical and endoscopic treatment was performed during the entire period None of the cases had a complication. The purpose of treatment was to stop bleeding in 8 cases and to relieve stenosis in 4 cases. Stop Hematology was achieved in 5 of 8 patients (63%), and stenosis was resolved in 2 of 4 patients (50%). It worked. The median duration of hemostatic response and the median duration of response to stenosis resolution were They were 103 days and 52 days, respectively. Median overall survival was 567 days. The median survival time after initiation of irradiation was 105 days. Adverse event Grade 1-2 nausea occurred in 4 cases, and Grade 1 esophagitis in 1 case.

Table 1: Patient list.

Case number	Gender	Age	Site	Clinical stage	Metastatic site	Number of metastas	PS	RT Cumulative dose (Gy)	Fr
1	Man	76	Antre	IV	Liver, peritoneum,	4	3	34	17
2	Man	77	Corps	IV	Lung	2	2	40	20
3	Man	74	Corps	IV	liver	3	1	50	20
4	Femal	65	Antre	III	Nothing	1	0	40	16
5	MAN	68	Antre	IV	Peritoneum	3	1	45	25
6	Man	55	Corps	IV	Liver, lung	3	1	45	25
7	Femal	61	Corps	IV	Nothing	1	1	30	10
8	Man	80	Cardia	IV	Peritoneum	2	2	38	15
9	Femal	69	Corps	IV	Liver , lung	3	1	45	18
10	Femal	64	Antre	IV	Nothing	1	1	50	28
11	Man	60	Corps	IV	Peritoneum	3	2	30	10

DISCUSSION

In patients with unresectable advanced gastric cancer, bleeding from the tumor and tumor growth accompanying gastrointestinal obstruction is common at the end of life. This palliative local therapy considered for treatment, endoscopic treatment, surgical operation, and radiotherapy. Policy decision In addition, the prognosis and wishes of the patient and family should be taken into consideration when choosing a treatment method. Radiation therapy is characterized by less invasiveness than surgical resection, It takes time for the therapeutic effect to be obtained.

There are the following reports on palliative radiotherapy for gastric cancer. In 1982, Mantell et al.1) irradiated 17 patients with anorexia. It was effective in 13 patients (76%). In 2007, Kim et al.3) Radiation therapy was administered to 20 patients with bleeding symptoms and 16 patients with anorexia. 14 patients (70%) and 13 patients (81%) responded to irradiation. rice field. In 2007, Tey et al.6) treated radiation alone in 24 patients with bleeding. Thirteen patients (54%) responded to irradiation and survived afterward. Eight patients with 11.4-month response duration and obstructive symptoms Of these, 2 (25%) responded. In 2009, Hashimoto et al.7) published Radiation alone was performed in 19 patients presenting with blood, and 13 patients (68.6%) responded. The median duration of response after

irradiation was 1.5 months. months, median survival after irradiation was 3.4 months in this case, the hemostatic response rate was 63%, and the stenosis release response rate was 50%. Compared with past reports, the results are considered to be almost the same. Radiation therapy for symptom relief may be combined with chemotherapy. Another option is to use Recently, chemotherapy The response rate for alleviating symptoms was higher in patients treated with there is also a report8) that there is a tendency for For example, the report of Kim et al.c The report showed a high response rate for both bleeding and obstruction, and chemotherapy55% and 75% of the cases, respectively, used both methods.c Thus, radiotherapy combined with chemotherapy tends to have a high response rate. However, compared with monotherapy, it is more invasive, and PS and general condition are It must be limited to good cases. Terminally ill patients have PS or systemic Often declining, opting for radiotherapy alone it is thought that there are many Asakura et al.9) reported that short-term irradiation is indicated for patients with a limited prognosis. In many cases, a total dose of 30 Gy/10 Fr is sufficiently effective. reported that In addition, the success or failure of radiotherapy is determined by a total dose of 46 Gy/ associated with exposure to doses of 16 Fr or higher 7). Thus, radiotherapy for the purpose of local symptom relief It is inferred that the success or failure of treatment depends

on the number of times of irradiation and the irradiation dose. The target is generally 30 Gy/10 Fr or more, and the general condition and prognosis are monitored. It is thought that the irradiation dose and the number of times of irradiation should be determined in light of this. Self In the experimental cases, the dose was 30 Gy/10 Fr or more in the completed cases. Bleeding In case of irradiation, the central It has been reported that it takes 3 days (range: 2-9 days) for the maximum value.^[10] This As shown in the above, radiotherapy requires a long treatment period before a response is obtained. Therefore, in cases where the general condition is rapidly deteriorating, Not suitable for emergency evacuation.

Regarding acute adverse events in irradiation alone, Hashimoto et al.7) reported Grade 3 leukopenia in 2 cases and Grade 3 hemorrhage Four cases of anorexia and nausea were reported. In this case, radiation there was a patient who died during irradiation, but it was due to the underlying disease. Other Grade 1-2 nausea in 4 cases, Grade 1 esophagitis however, there was only one case, and in general, the invasiveness of radiotherapy alone was It is presumed to be lower than surgical therapy.

CONCLUSION

For palliative radiotherapy for patients with advanced gastric cancer at our hospital reported about. Radiation therapy has a certain effect if the case is selected. Promising and minimally invasive, may be a good option.

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