A Complete Response in a Case of Esophageal and Gastric Double Cancers by Chemoradiotherapy with TS-1/CDDP.

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Abstract

In November 2002, a 74-year-old male patient came to our department with complaints of abdominal discomfort. Endoscopy revealed type 0-IIc + Ia superficial spreading cancer in the middle intrathoracic esophagus and type 3 gastric cancer in the posterior wall from the cardiac region to the upper gastric body. Since the patient refused surgery, chemoradiotherapy for the esophageal and gastric double cancer was planned. Considering the QOL of the patient, we selected TS-1/CDDP chemotherapy. The entire course was completed without adverse reaction of grade 3 or above. Endoscopy revealed a significant tumor contraction in both the esophagus and stomach. Although complete remission was confirmed in the esophageal lesion, the biopsy of the stomach lesion revealed cancer cells. We recommended gastric resection, however, the patient refused. The patient was followed on an ambulatory basis. Endoscopy and biopsy that were performed 3 months later revealed the absence of cancer cells. A complete remission was observed in both esophagus and stomach. Since then, the patient has been maintaining his CR status, which was confirmed by endoscopy in January 2004. Based on this result, the TS-1/CDDP chemoradiotherapy may be sufficiently effective for achieving CR of both esophageal and gastric cancers. In addition, since this therapy can maintain the QOL of patients, it should be aggressively conducted in the future.

Key Words

TS-1/CDDP, Chemoradiotherapy, Esophageal and Gastric Double Cancers

Introduction

Esophagectomy, which is a procedure used in the case of esophageal cancer and lymph node dissection, involves large scale intervention and a large number of patients refuse to receive it. We report the case of a patient with esophageal and gastric double cancers, who had refused surgery and received the TS-1/cisplatin (CDDP) therapy that successfully eliminated both cancers.

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Case Report

Patient: A 74-year-old male.
Chief Complaint: Abdominal discomfort.
Past History: Diabetes at the age of 69 years, hypertension at the age of 73 years.
Family History: None.
Present Illness: In November, 2002, the patient presented with complaints of abdominal discomfort experienced around the beginning of the month. Upper endoscopy was performed and ulcerative lesions from the cardiac region to the upper gastric body and Lugol-unstained area in the esophagus were revealed. In December, the patient was admitted to the hospital for further investigation and treatment.

Status at Admission: The patient’s height was 164 cm and his weight was 51 kg. The palpebral conjunctiva was not anemic and the bulbar conjunctiva was not icteric. The thoracoabdominal region was normal and no superficial lymph nodes were palpable. No edema was present in the limbs.

Blood Test at Admission: The patient had mild anemia with Hb level of 12.2 g/dl and a high fasting plasma glucose level of 153 mg/dl. The CEA was 6.0 ng/ml, which was slightly high.

Endoscopy: An extensive granular mucosal change was observed 30–36 cm from the incisor. A few portions were large and granular with distinct mucosal projections and depressions. Raised granular white spots were also present in some areas. The Lugol staining showed a 3/4th-circumferential unstained area within the same lesion. In addition, irregular ulcerative lesions with converging folds on the posterior wall from the cardiac region to the upper gastric body and on the anterior wall were observed (Figures 1a, b). Biopsy revealed esophageal squamous cell cancer and well-differentiated gastric adenocarcinoma (Figures 2a, b). Abdominal CT showed swellings of the lymph nodes in the cardiac region (Figure 3).

Clinical Course: We diagnosed that the patient had synchronous esophageal and gastric double cancers, which consists of type 0-IIc+Iia superficial spreading esophageal cancer and type 3 gastric cancer. Although both cancers were considered operable, the patient strongly objected to surgery. Considering the QOL of the patient, we commenced TS-1/CDDP chemoradiotherapy from January, 2003. TS-1 was consecutively administered at 100 mg/body for 14 days and CDDP was administered at 70 mg/m² on day 8. Subsequently, after a 3-week interval, the treatment was performed two courses. In the case of esophageal and gastric lesions, including lymph nodes, a 60 Gy radiation was planned in five fractions and two intervals in a week with no
resting period. The entire course was completed without grade 3 or above myelosuppression, although a few gastrointestinal symptoms, such as grade 1–2 anorexia, were observed. In March, an endoscopy was performed to evaluate the patient’s disease. Although a limited amount of granular mucosal change remained in the esophagus, the overall conditions significantly improved. Lugol staining showed a circumferential unstained area within the same lesion. Mucosal flare and contortion were confirmed in the gastric lesion; the ulcer floor cleared and cicatrized. Biopsy results revealed that the esophagus was devoid of cancer cells; however, this was not the case with the stomach. Abdominal CT showed no swelling of the lymph nodes in the cardiac lesion. (Figure 4) At this juncture, a conclusion was arrived at and the patient was informed that the esophageal cancer showed CR and it should be followed up, and the gastric cancer should be operated. The patient, however, refused surgery and decided to receive follow-up care for both esophageal and gastric cancers. Three months later, an endoscopy was performed. No distinct tumor lesions were revealed (Figures 5a, b) and biopsy revealed absence of cancer cells in both esophagus and stomach (Figures 6a, b). No recurrence was detected thereafter, until the endoscopy was performed in January 2004.

Discussion

Although the treatment for synchronous double cancers of the esophagus and stomach differs depending on their progression, surgical resection is generally selected. However, currently, the QOL of
patients is gaining importance and medical treatment is often selected. In the case of esophageal cancer, in particular, an increasing number of patients who are recommended for surgical treatment opt for chemoradiotherapy. The surgery of esophageal and gastric double cancers is more interventional than that required for normal esophageal cancer. Further, it is often difficult to choose the reconstruction organ, and a limited number of cases are recommended for surgery. At this stage, a few reports on successful chemotherapy and radiation therapy for esophageal and gastric double cancers are available. However, for the purpose of effectiveness and the maintenance of the patient’s QOL, TS-1/CDDP therapy was selected as the chemotherapy. The result was evaluated as CR. Two case reports in which TS-1/CDDP chemoradiotherapy was used for esophageal and gastric double cancers have been reported. However, no reports that include esophageal and gastric lesions in the radiation range similar to the present case are available.

The response rate of TS-1 alone for gastric cancer was 44.6% (considered to be good) in the late phase II clinical trial. On combining the biochemical modulator CDDP with TS-1, a dramatic effect was observed, wherein a response rate of 74% was achieved. Concurrently, different types of chemoradiotherapies for advanced or recurrent gastric
cancer have been studied. Akagi et al. reported a favorable result, wherein the response rate was 70% and the CR rate was 30%, in the absence of adverse events. Saikawa et al. also reported successful results—two CR and one PR out of four cases. On the contrary, a standard therapy for non-operable advanced esophageal cancer, namely, 5FU/CDDP chemoradiotherapy, reduces the patients’ QOL since a continuous intravenous infusion of 5FU for 24 h is essential. A few single-center reports on TS-1 chemoradiotherapy aiming to maintain patients’ QOL are available. We initiated a clinical trial of TS-1 chemoradiotherapy in 2001 and the reported treatment results and QOL improvement are comparable to standard therapies. Based on these results, the TS-1/CDDP chemoradiotherapy is a promising method of treatment that may be able to achieve CR in both esophageal and gastric cancers. Since adverse events of the therapy are considered to be in an acceptable range, this therapy should be aggressively administered in cases of non-operable advanced cancers and patients who are elderly or refuse to receive surgery.

References


TS-1/CDDP 放射線併用療法にて CR を得た食道胃重複癌の一例

症例は 74 才、男性。腹部不快感を主訴に平成 14 年 11 月に当科受診した。内視鏡検査にて胸部中部食道に 0-IIc+Ila 型、表在拡大型の癌を認め胃には幽門部から胃体上部にかけての後壁側に 3 型の癌を認めた。患者が手術を拒否したため食道胃重複癌に対し放射線化学療法を計画した。化学療法に関しては患者の QOL を考え TS-1/CDDP を選択した。経過中 grade3 以上の副作用は認めず治療は遂げできた。内視鏡所見上食道、胃ともに腫瘍の著明な縮小を認めた。食道癌は CR であったが胃病変の生検より癌細胞を認めため胃切の手術を提示したが患者は拒否をされた。以後外来にて経過観察を行っていたが、治療終了三ヶ月後の内視鏡所見では肉眼、生検上ともに癌細胞を認めず食道、胃ともに CR となった。以後平成 16 年 1 月の内視鏡検査まで CR を継続している。以上より TS-1/CDDP 放射線化学療法が食道癌、胃癌ともに有効である可能性があり CR が十分期待できる治療法であると考えられた。また、患者の QOL は維持できるため今後積極的に行うべき治療であろう。

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