

Figure 1. Endoscopic appearance of the elevated lesion in the greater curvature of the lower third area of the stomach. The lesion was covered with normal mucosa.



Figure 2. Endoscopic ultrasonography (EUS) revealed that a hypoechoic mass covered with hyperechoic lesion that had anechoic areas interrupted the second and third layers of the gastric wall.

and vertical margin, and resected specimen was 30×22 mm in size (Fig. 3). Histological examination of the protruding lesion revealed that the tumor was distributed from the mucosa to submucosal layer and multiple cysts were adjacent to the tumor (Fig. 4A). The proliferation of fibroblasts and the infiltration of inflammatory cells such as plasma cells and eosinophils were seen in the submucosal tumor (Fig. 4B). This tumor was diagnosed as gastric IFP. The elongation of the gastric foveolae along with hyperplasia and cystic dilatation of the gastric glands were seen (Fig. 4C). The protruding lesion was diagnosed as GCP concomitant with gastric IFP. Histologically, the tumor was surrounded by intestinal metaplastic mucosa. The postoperative course was uneventful. He has been under close periodic observation, and there is no evidence of disease 29 months after IT-ESD.

Discussion

IFP is a rare mucosal or submucosal lesion of the gastrointestinal tract that follows a benign course. Most of the fibroids reported were located in the mucosa and submucosa, although Ishikura et al (8) reported six lesions and we also reported one lesion (7) limited to the mucosa. The pathogenesis of IFP remains unknown. Endoscopic findings of IFPs are smooth sessile or pedunculated polyps. The final diagnosis of IFP depends on the pathological findings, however the histological findings of the biopsy specimen are often difficult to diagnose. In the present case, the tumor was



Figure 3. Macroscopic findings of the resected tumor. The resected specimen was 30×22 mm in size and the protruding lesion was resected completely with a safe lateral and vertical margin.

completely resected by IT-ESD and the diagnosis of GCP concomitant with gastric IFP was made. This may be the first report of GCP concomitant with gastric IFP.

GCP was first described by Littler and Gleibermann in 1972 (2). It is characterized histologically by elongation of the gastric foveolae along with hyperplasia and cystic

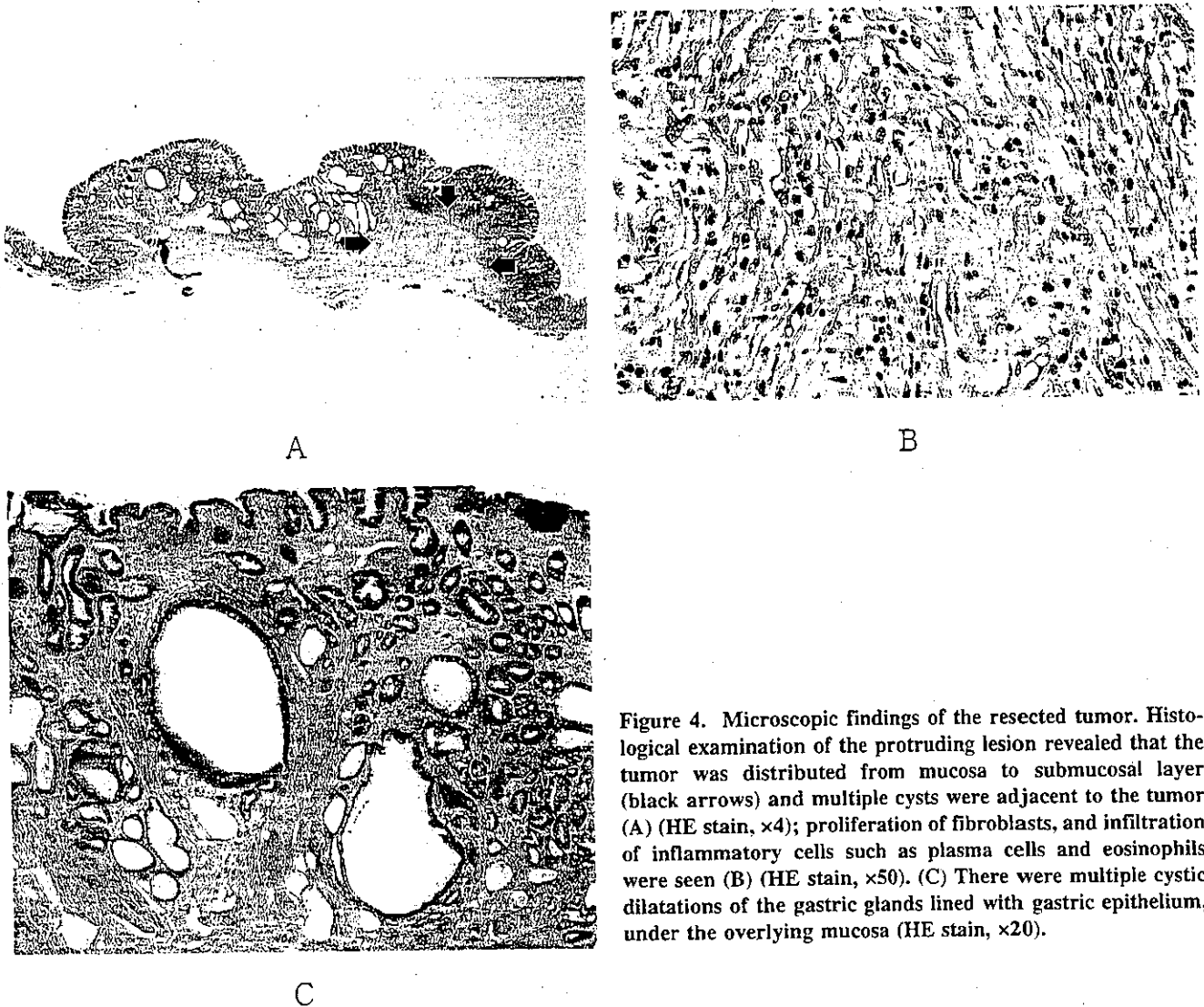


Figure 4. Microscopic findings of the resected tumor. Histological examination of the protruding lesion revealed that the tumor was distributed from mucosa to submucosal layer (black arrows) and multiple cysts were adjacent to the tumor (A) (HE stain, $\times 4$); proliferation of fibroblasts, and infiltration of inflammatory cells such as plasma cells and eosinophils were seen (B) (HE stain, $\times 50$). (C) There were multiple cystic dilations of the gastric glands lined with gastric epithelium, under the overlying mucosa (HE stain, $\times 20$).

dilatation of the gastric glands extending into the gastric submucosal layer (2–6). These lesions are usually found at the gastroenterostomy sites, presumably because of increased mucosal mobility accompanying peristaltic contractions and repair of the preanastomotic gastric mucosa after damage caused by reflux of duodenal contents (2, 9, 10). Koga et al described that there were 4 cases of GCP (9.5%) in their 42 patients who had once undergone gastrojejunostomy and received further surgery on account of various reasons (9). In Japan, there are many reports describing the association of GCP with early or small cancerous lesions in the remnant stomach (11, 12). Thus GCP has been proposed to be a possible precancerous lesion itself (13). GCP may rarely also develop in an unoperated stomach as in the present case. GCP in an unoperated stomach frequently occur in the gastric fundus (4–6). However, few cases with GCP in an unoperated stomach have been reported and further analysis of many cases is necessary in the future. GCP in an unoperated stomach has generally been assumed to be of congenital origin, mainly because of the lack of documented

prior gastric ulceration or trauma (5, 14). However, the pathogenesis of GCP in an unoperated stomach is not clear. Thus further studies on the pathogenesis of GCP in an unoperated stomach are certainly necessary.

The pathogenesis of IFP remains unknown, however, some authors have proposed that IFP is caused by an allergic reaction to an inflammatory stimulus such as bacterial, chemical, traumatic, etc, or is a reactive lesion of fibroblastic or myofibroblastic nature (15). Gastric IFP frequently appears in the antrum (7), and the incidence of gastric IFP was reported to be 3.1% of one series of 5,515 gastric polyps by Stolte et al (16). Recently, Nishiyama et al (17) reported a case of IFP that morphologically changed after the *H. pylori* eradication therapy. They claimed that factors derived from gastric epithelial cells in response to *H. pylori* infection, such as inflammatory cytokines and growth factors, might affect the growth of IFPs. Their opinion is not proved although there is another report describing the relation between IFP and *H. pylori* infection (18). It is interesting that their report suggests the relationship between gastric IFP and *H. pylori*.

We could speculate possible pathogenetic relationships of gastric IFP with GCP as follows: 1) GCP occurs via stimulation of IFP and 2) IFP and GCP arise independently. The present case may indicate that some common factors are involved in the etiology of IFP and GCP, though there is no direct evidence at present. On the supposition, one of the factors may be *H. pylori*. However, there have been no reports describing the relationship between GCP and *H. pylori*. Further studies on the relationship between IFP and GCP are certainly necessary. The present case does not have direct evidence that IFP is related to GCP, however, we thought it would be valuable to report this case, since this may be the first report of GCP concomitant with gastric IFP occurring in an unoperated stomach. However, it is likely that there are latent patients with GCP concomitant with gastric IFP occurring in an unoperated stomach, which might be discovered by endoscopic resection in the future. Because both gastric IFP and GCP in an unoperated stomach are benign tumors and they are seldom resected by endoscopic resection or surgery.

The IT-ESD is a useful new endoscopic mucosal resection (EMR) method, which recently has been widespread in Japan. It is difficult to remove a complete tumor larger than 10 mm in diameter in one-piece by the usual strip biopsy method. However Ohkuwa et al (19) reported a one-piece resection rate of IT-ESD (between 11 and 20 mm) of 75% in 16 patients with adenocarcinoma or adenoma. As to the endoscopic treatment of gastric IFP, Nishio et al (20) reported a case of gastric IFP who revealed an increase in size of the IFP after incomplete endoscopic resection within a year. Thus, gastric IFP should be resected completely with a safe margin if EMR is performed. The lesion in the present case was about 20 mm, however, the result of IT-ESD was that we could resect this tumor completely and ensure a safe margin. Here, IT-ESD was an effective and safe therapy for a gastric protruding lesion of nearly 20 mm in diameter.

In conclusion, we report the first case of GCP adjacent to gastric IFP occurring in an unoperated stomach. The IT-ESD was a useful treatment method for GCP concomitant with IFP in the present case. There have been no previous case reports of GCP concomitant with gastric IFP. This case emphasizes that it is important to keep in mind that gastric IFP might be accompanied by GCP in an unoperated stomach though such a condition is extremely rare.

References

- 1) Konjetzny GE. Ueber Magenfibrome. Beitr Klin Chir 119: 53-61, 1920.
- 2) Littler ER, Gleibermann E. Gastritis cystica polyposa (Gastric mucosal prolapse at gastrectomy site, with cystic and infiltrative epithelial hyperplasia). Cancer 29: 205-209, 1972.
- 3) Ozenc AM, Ruacan S, Aran O. Gastritis cystica polyposa. Arch Surg 123: 372-373, 1988.
- 4) Wu MT, Pan HB, Lai PH, Chang JM, Tsai SH, Wu CW. CT of gastritis cystica polyposa. Abdom Imaging 19: 8-10, 1994.
- 5) Park JS, Myung SJ, Jung HY, et al. Endoscopic treatment of gastritis cystica polyposa found in an unoperated stomach. Gastrointest Endosc 54: 101-103, 2001.
- 6) Tuncer K, Alkanat M, Musoglu A, Aydin A. Gastritis cystica polyposa found in an unoperated stomach: an unusual case treated by endoscopic polypectomy. Endoscopy 35: 882, 2003.
- 7) Hirasaki S, Endo H, Nishina T, Masumoto T, Tanimizu M, Hyodo I. Gastric cancer concomitant with inflammatory fibroid polyp treated with endoscopic mucosal resection using an insulation-tip diathermic knife. Intern Med 42: 259-262, 2003.
- 8) Ishikura H, Sato F, Naka A, Kodama T, Aizawa M. Inflammatory fibroid polyp of the stomach. Acta Pathol Jpn 36: 327-335, 1986.
- 9) Koga S, Watanabe H, Enjoji M. Stomal polypoid hypertrophic gastritis: a polypoid gastric lesion at gastroenterostomy site. Cancer 43: 647-657, 1979.
- 10) Kondo K, Kojima H, Akiyama S, Ito K, Takagi H. Pathogenesis of adenocarcinoma induced by gastrojejunostomy in Wistar rats: role of duodenogastric reflex. Carcinogenesis 16: 1747-1751, 1995.
- 11) Aoyagi K, Koufuji K, Yano S, et al. Two cases of cancer in the remnant stomach derived from gastritis cystica polyposa. Kurume Med J 47: 243-248, 2000.
- 12) Ochiai M, Matsubara T, Zhi LZ, et al. Gastritis cystica polyposa associated with a gastric stump carcinoma, with special reference to cell kinetics and p53 gene aberrations. Gastric Cancer 3: 165-170, 2000.
- 13) Franzin G, Musola R, Zamboni G, Manfrini C. Gastritis cystica polyposa: a possible precancerous lesion. Tumori 71: 13-18, 1985.
- 14) Chakrovorty RC, Schatzki PF. Gastric cystic polyposis. Am J Dig Dis 20: 981-989, 1975.
- 15) Widgren S, Pizzolato GP. Inflammatory fibroid polyp of the gastrointestinal tract: Possible origin in myofibroblasts? A study of twelve cases. Ann Pathol 7: 184-192, 1987.
- 16) Stolte M, Sticht T, Eidt S, Ebert D, Finkenzeller G. Frequency, location, and age and sex distribution of various types of gastric polyp. Endoscopy 26: 659-665, 1994.
- 17) Nishiyama Y, Koyama S, Andoh A, et al. Gastric inflammatory fibroid polyp treated with *Helicobacter pylori* eradication therapy. Intern Med 42: 263-267, 2003.
- 18) Shalom A, Wasserman I, Segal M, Orda R. Inflammatory fibroid polyp and *Helicobacter pylori*. Aetiology or coincidence? Eur J Surg 166: 54-57, 2000.
- 19) Ohkuwa M, Hosokawa K, Boku N, Ohtu A, Tajiri H, Yoshida S. New endoscopic treatment for intramucosal gastric tumors using an insulated-tip diathermic knife. Endoscopy 33: 221-226, 2001.
- 20) Nishio A, Ueda S, Ohkuma M, et al. Early gastric cancer producing alpha-fetoprotein, report of a case. Gastroenterol Endosc 34: 1324-1331, 1992 (in Japanese with English Abstract).

Nationwide Survey on Complementary and Alternative Medicine in Cancer Patients in Japan

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ABSTRACT

Purpose

To determine the prevalence of use of complementary and alternative medicine (CAM) by patients with cancer in Japan, and to compare the characteristics of CAM users and CAM nonusers.

Patients and Methods

A questionnaire on cancer CAM and the Hospital Anxiety and Depression Scale were delivered to 6,607 patients who were treated in 16 cancer centers and 40 palliative care units.

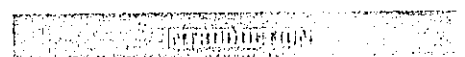
Results

There were 3,461 available replies for a response rate of 52.4%. The prevalence of CAM use was 44.6% (1,382 of 3,100) in cancer patients and 25.5% (92 of 361) in noncancer patients with benign tumors. Multiple logistic regression analysis determined that history of chemotherapy, institute (palliative care units), higher education, an altered outlook on life after cancer diagnosis, primary cancer site, and younger age were strongly associated with CAM use in cancer patients. Most of the CAM users with cancer (96.2%) used products such as mushrooms, herbs, and shark cartilage. The motivation for most CAM use was recommendation from family members or friends (77.7%) rather than personal choice (23.3%). Positive effects were experienced by 24.3% of CAM users with cancer, although all of them received conventional cancer therapy concurrently. Adverse reactions were reported by 5.3% of cancer patients. CAM products were used without sufficient information by 57.3% of users with cancer and without a consultation with a doctor by 60.7% of users.

Conclusion

This survey revealed a high prevalence of CAM use among cancer patients, without sufficient information or consultation with their physicians. Oncologists should not ignore the CAM products used by their patients because of a lack of proven efficacy and safety.

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The WHO defines complementary and alternative medicine (CAM), or so-called traditional medicine, as follows: "a comprehensive term used to refer both to traditional medical systems such as traditional Chinese medicine, Indian ayurveda and Arabic unani medicine, and to various forms of indigenous medicine."¹ CAM therapies include medication therapies (which involve the use of herbal medicine, animal parts,

and/or minerals) and nonmedication therapies carried out primarily without the use of medication (such as acupuncture or manual therapy). Populations throughout Africa, Asia, and Latin America use traditional medicine to help meet their primary health care needs. In addition to being accessible and affordable, traditional medicine is also often part of a wider belief system, and is considered integral to everyday life and well-being. In Europe and North America, CAM is increasingly being used in parallel to

allopathic medicine, particularly for treating and managing chronic disease. Concerns about the adverse effects of chemical medicines, a desire for more personalized health care, and greater public access to health information fuel the increasing use of CAM in many industrialized countries.²⁻⁵

The widespread use of a variety of nutritional, psychological, and natural medical approaches as CAM has been well documented.^{2,6-8} Recent surveys demonstrate that more than 50% of US cancer patients use CAM therapies at some point after their diagnosis.^{3,6,7} Despite extensive use, there is a paucity of data available to indicate whether these practices are efficacious and safe.⁹⁻¹¹ Therefore, serious research efforts are underway to determine the scope of CAM use by patients and their motivations for its use.⁶⁻¹⁰ CAM in cancer medicine seems to be widely available in Japan as well as in the Western countries. We performed a preliminary survey on cancer CAM in a single cancer center in 1999. This survey revealed that 32% of cancer patients used CAM, and the most frequently used CAM involved natural products, such as mushrooms, shark cartilage, and beeswax-pollen mixtures.¹² The most pressing and significant problems associated with these products were commonly held but incorrect assumptions and the absence of any regulatory oversight. In addition, interactions between herbs and drugs may increase or decrease the pharmacologic or toxicologic effects of either component. For example, St John's wort has recently been reported to dramatically reduce plasma levels of SN-38 (the active metabolite of irinotecan, a key oncologic drug), which may have a deleterious impact on treatment outcome.¹³

An enormous amount of unreliable information on cancer CAM is available from the Internet and other media sources. It is often the case that cancer patients and their relatives are at a loss about how to deal with such information and have a difficult time choosing what kind of CAM they should adopt. However, there have been no large-scale surveys of this sort in Asia, and the actual state of CAM use in cancer patients is still unclear. Therefore, we performed a nationwide cross-sectional survey to evaluate the prevalence of CAM use in cancer patients and their perceptions of cancer CAM, especially of CAM products used in Japan.

OBJECTIVES AND METHODS

Participants

Before initiation of this survey, the study protocol was examined by the institutional review boards of cancer centers and related hospitals (CCs) joining the nationwide association of medical centers for cancer and adult diseases in Japan, and hospice and palliative care units (PCUs) joining the Japanese association of palliative care. Sixteen of 29 CCs and 40 of 88 PCUs approved the survey. All participating institutions agreed not to treat patients systematically with any CAM. The total number of questionnaires that would be distributed to the patients was predicted by the responsible physician working for each collaborating institute, and this information was provided in advance to the National Shikoku Cancer Center. Questionnaires on cancer CAM were then

sent to the responsible collaborating physicians in the CCs and PCUs from October 2001 to March 2002. The day on which the questionnaires were distributed to the patients was determined voluntarily by each institute within 2 weeks of receipt. Questionnaires were distributed to the patients by the medical staff (physicians, nurses, clerks, and so on) at each collaborating institute after exclusion of those with an Eastern Cooperative Oncology Group performance status of 4 and those who underwent surgery that day. Replies were sent back to the National Shikoku Cancer Center directly from each patient. Questionnaires were marked in advance to identify the type of clinic the patients were attending (ie, CCs or PCUs, and inpatient or outpatient). Returned questionnaires were coded with an identification number to ensure confidentiality.

Questionnaire

We had previously evaluated a questionnaire about cancer CAM in 219 cancer patients who were admitted to the National Shikoku Cancer Center as a preliminary study.¹² In the present study, we used a modified version of that questionnaire after testing several samples. Some additional questions were quoted from previously published articles.⁶⁻⁸ The original questionnaire we used was written in Japanese. The attached questionnaire (Appendix) has been translated into English. The questionnaire was developed through a systematic literature review and discussions by two experienced medical oncologists, a psychiatrist, a pharmacist, a basic scientist, and a research assistant. On the cover page of the questionnaire, CAM was clearly defined as follows: "any therapy not included in the orthodox biomedical framework of care for patients. CAM means remedies that are used without the approval of the relevant government authorities, such as the Ministry of Health and Welfare in Japan, that approve new drugs after peer review of preclinical experiments and clinical trials regulated by law. CAM usually skips these steps and is offered directly to the public. Health insurance does not usually cover the cost of CAM, and patients will be liable for the whole expense incurred by any CAM. CAM includes natural products from mushrooms, herbs, green tea, shark cartilage, other special foods, megavitamins, acupuncture, aromatherapy, massage, meditation, and so on."

The questionnaire was composed of the following two parts: background of the patients (disease, onset, age, sex, daily living activity level, educational level, religion, cancer treatment, changes of outlook on life, satisfaction with receiving conventional medicine, and use of cancer CAM; questions 1 to 12) and users' perception of cancer CAM (initiation time, kinds of CAM used, reason for starting CAM, method of obtaining information about the CAM used, expectations for CAM use, effectiveness or ineffectiveness, adverse effects, average expense per month, whether a history of CAM use was provided to the physician in charge, whether the physician in charge was consulted, response of physician, reason for not consulting physician, and concurrent use of anticancer drugs and CAM products that are sold over the counter; questions 13 to 28).

Hospital Anxiety and Depression Scale

A brief scale, the Hospital Anxiety and Depression Scale (HADS), was used in this study to clarify the relationship between emotional state and CAM preference. The HADS has 14 items in two question groups, one each on anxiety and depression, and each question is rated from 0 to 3. The validity and reliability of the Japanese version of HADS have been confirmed previously.^{14,15} From previous articles, including the original one and studies in the Japanese population, we adopted 10 points as the cutoff above which anxiety and depression would be scored as high.^{14,16} The patients in the high group were considered to have an adjustment disorder or more severe condition. The HADS was delivered to patients along with the questionnaire on CAM.

Statistical Analysis

Differences of CAM use within categories of selected demographic and clinical variables (age, sex, disease sites, daily living activity level, patient's desire, changes of outlook on life, institute, education, and religion) were assessed by the χ^2 test. The factors predicting CAM use were analyzed by univariate analysis and then multiple logistic regression analysis was performed using all significant predictor variables ($P < .05$). The analysis provided an odds ratio and 95% CI for each variable while simultaneously controlling for the effects of other variables. Variables not contributing substantially to the model were systematically removed in a backward stepwise regression process using the likelihood ratio test as the criterion for removal. The Hosmer-Lemeshow χ^2 test was used to assess the goodness of fit between the observed and predicted number of outcomes for the final model, with $P > .05$ indicating a good fit. All analyses were performed using SPSS Base and Regression models 11.0J (SPSS Japan Inc, Tokyo, Japan)



Response Rate to Questionnaire and CAM User Rates

A total of 6,607 questionnaires on cancer CAM were sent to collaborating CCs and PCUs according to the required number estimated by the primary investigators at those institutes. As a result, questionnaires were delivered to 6,074 patients who were treated in CCs (2,688 inpatients and 3,386 outpatients) and to 533 patients who were treated in PCUs (367 inpatients and 166 outpatients). A total of 3,733 questionnaires were returned to our center, of which 3,461 were valid

with useable answers. The remaining 272 returned questionnaires were invalid because of a critical lack of major answers, such as unwritten diagnosis or no response to CAM use. Consequently, the rate of valid replies was 52.4%. Of the valid replies, 3,100 were from cancer patients and 361 were from noncancer patients with benign tumors. The flow diagram of the study population is indicated in Figure 1.

The prevalence of CAM use in cancer patients was 44.6% (1,382 of 3,100) and that in noncancer patients was 25.5% (92 of 361). In terms of background differences, noncancer patients were younger, had less impaired daily activity, and were much more likely to be in CCs than cancer patients. The rate of use among cancer patients was significantly higher than that for noncancer patients ($P < .0001$). All of the 3,100 replies from cancer patients were subject to analysis. Many users (86.7%) started CAM after their diagnosis of cancer and 73.3% of users were continuing it at the time of the survey.

Backgrounds of Patients and CAM Users

The backgrounds of all the cancer patients and CAM users with cancer are summarized in Table 1. The prevalence of CAM use was significantly higher in patients who were younger than 61 years old ($P < .0001$), female ($P < .0001$), patients with a lower daily activity level ($P < .0001$), patients with higher education ($P < .0001$), patients who received chemotherapy ($P < .0001$), patients with a change of outlook on life ($P < .0001$), patients who were dissatisfied with conventional treatments ($P = .0001$), patients in PCUs ($P < .0001$), and patients with a low HADS anxiety score

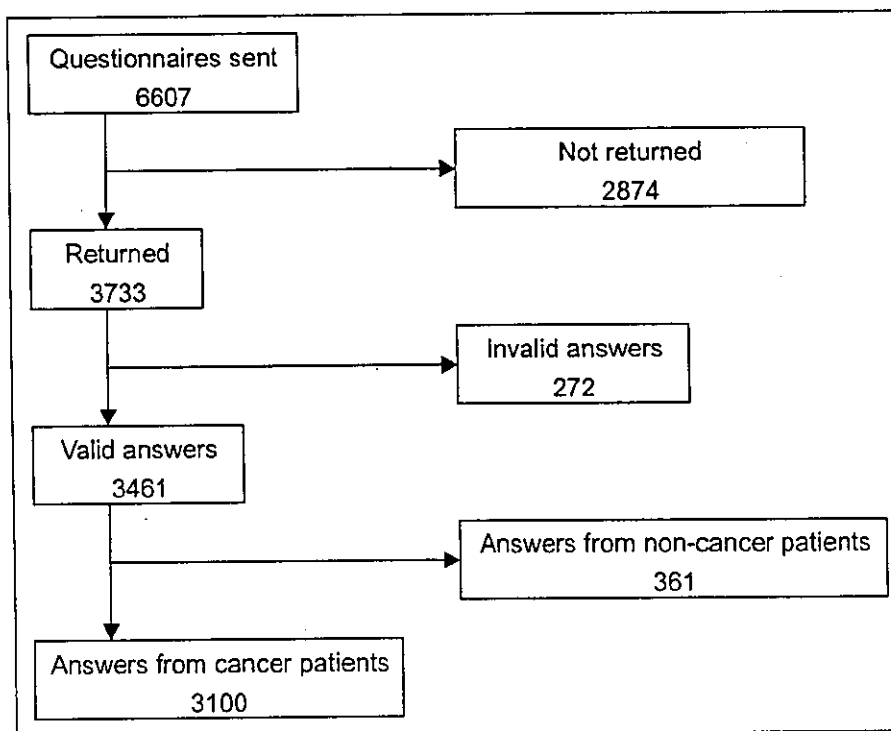


Fig 1. Flow diagram of the study population

Background	No. of Patients	No. of Users	%	<i>P</i> (χ^2 test)
Total	3,100	1,382	44.6	
Age, years				
> 60	1,603	625	39.0	
≤ 60	1,485	752	50.6	< .0001
Sex				
Male	1,484	586	39.5	
Female	1,614	796	49.3	< .0001
Activity of daily living				
Free or somewhat limited	2,293	1,002	43.7	
Bed rest (≥ 50% of each day)	726	348	47.9	< .0001
Education				
High school	1,721	719	41.8	
Post-high school	879	464	52.8	< .0001
Practicing religion				
No	2,140	915	44.2	
Yes	593	281	47.5	1660
Conventional treatment				
Chemotherapy	1,839	968	52.6	
Nonchemotherapy	1,260	414	32.9	< .0001
Change in outlook on life				
No	1,381	509	36.9	
Yes	1,558	793	50.9	< .0001
Treatment met patient's needs				
No	1,212	591	48.8	
Yes	1,830	762	41.7	.0001
Institute				
Cancer centers	2,811	1,203	42.8	
Palliative care units	289	179	61.9	< .0001
Treatment place				
Inpatient ward	1,665	717	43.1	
Outpatient clinic	1,434	665	46.4	.0699
HADS				
High anxiety score (≥ 11)	1,915	852	44.5	
Low anxiety score (< 11)	741	378	51.0	.0029
High depression score (≥ 11)	1,018	510	50.0	
Low depression score (< 11)	1,652	734	44.4	.0049
Cancer				
Lung	380	203	53.4	
Breast	532	273	51.3	
Hepatobiliary	256	129	50.4	
Genitourinary	445	195	43.9	
Gastrointestinal	708	278	39.3	
Head and neck	266	82	30.8	
Other	513	222	43.3	< .0001

Abbreviations: CAM, complementary and alternative medicine; HADS, Hospital Anxiety and Depression Scale.

($P = .0029$) and a high HADS depression score ($P = .0049$). In terms of disease sites, the rate of use was higher in patients with lung, breast, and hepatobiliary cancers than in those with other cancers ($P < .0001$). The prevalence of CAM use in inpatient wards of CCs and that in outpatient clinics of CCs was 40.6% and 45.3%, respectively. The prevalence of CAM users in inpatient wards of PCUs and that in outpatient clinics of PCUs was 61.0% and 64.3%, respectively. The prevalence of CAM use in PCUs was significantly higher than that in CCs in outpatient clinics ($P < .0001$), as well as inpatient wards ($P < .0001$). Similarly, the prevalence of CAM use in inpatient wards was significantly higher than that in outpatient clinics in both CCs ($P < .0001$) and PCUs ($P < .0001$).

Predictors of Cancer CAM Use

Multivariate logistic regression analysis was performed to detect the factors predictive of CAM use, using the variables with a significantly different rate among users. The institutional review board of one CC did not permit the questions about education and religion, and 500 questionnaires in which those two questions were deleted were sent to that center. As the result, the rate of reply on education and religion was apparently low. Given that the anxiety and depression scores of HADS could not be calculated if one of each of seven questions was not answered, the number of available replies was also decreased relative to the other questions. For these reasons we performed two analyses of

the relevant variables separating the two patient populations: analysis 1 included the significant variables other than education and HADS, and analysis 2 included all significant variables as shown in Table 2. Patients who received chemotherapy; patients in PCUs; patients whose outlook on life had changed; patients with lung, breast, or hepatobiliary cancer; patients younger than 61 years old; and female patients were more likely to use CAM in both sets of analysis. In analysis 2, higher education was determined as a potent predictive factor, and dissatisfaction with conventional treatments was a weak predictive factor.

Types of CAM

The types of CAM used are listed in Table 3. The majority of CAM users (96.2%) relied on CAM products as opposed to nonmedical therapies. The most frequently used CAM product was mushrooms (*Agaricus* 60.6% and active hexose correlated compound [AHCC] 8.4%). *Agaricus* is extracted from a particular type of mushroom, *Agaricus blazei Murill*. It is purported to be an interferon inducer. AHCC is thought to act as an immunomodulator. Other CAM products were propolis (28.8%), Chinese herbs (7.1%), chitosan (7.1%), and shark cartilage (6.7%). Propolis is a beeswax-pollen mixture. Chitosan is an extract from crustaceans, such as crabs and lobsters. These are claimed to be enhancers of the immune system. Shark cartilage is known to be an inhibitor of tumor angiogenesis.¹⁷ Chinese herbs (easily bought over the counter, but not prescribed by physicians) were used by 7.1% of patients. The rate of use of traditional Chinese medicine (qigong, moxibustion, and acupuncture) was less than 4%.

Perceptions and Attitudes Toward CAM

As shown in Table 3, 77.7% of the patients started using CAM on recommendation from family members or friends. Only 23.3% of the patients decided to use CAM on the basis of their own will. Patients expected the following effects from CAM: suppression of tumor growth (67.1%), cure (44.5%),

symptom relief (27.1%), and complementary effects to conventional therapy (20.7%). In terms of the effectiveness of CAM, 24.3% of the patients experienced positive effects, such as tumor shrinkage, inhibition of tumor growth, pain relief, fewer adverse effects from anticancer drugs, and feeling better. However, at the same time, all of the patients were treated with conventional therapies such as surgery, chemotherapy, hormonal therapy, and/or radiation. The effects were not related to the use of any specific CAM product. Almost two thirds of the patients did not know if the CAM really worked or not. Conversely, only 5.3% of the patients experienced adverse effects, such as nausea, diarrhea, constipation, skin eruption, and liver dysfunction. No adverse effects were experienced by 62.2% of the patients. Patients who were uncertain about adverse effects comprised 32.6% of respondents.

More than half of the patients (57.3%) started CAM without obtaining enough information on it. Most of the patients (84.5%) had not been asked about CAM use by their physician or other health professionals. Nearly two thirds of the patients (60.7%) have never consulted their physicians on CAM use. When the patients consulted their physicians, 60.3% of the patients were told that they were free to use it or not. Patients who were told to continue using CAM and those who were told to cease use comprised 10.5% (8.5% in CCs and 19.5% in PCUs) and 11.3% (12.2% in CCs and 7.3% in PCUs) of CAM users, respectively. The main reason (56.1%) given for why they were not willing to ask their physicians about CAM was that their physicians did not ask about CAM use. The prevalence of patients who thought the physicians would not understand CAM and who thought they would prohibit CAM use was 19.4% and 8.7%, respectively.

The prevalence of concurrent use of anticancer drugs and CAM products was 61.8% in CAM users. The average monthly expenditure for CAM was 57,000 yen (approximately US \$500; range, 0 to 1200,000 yen).

Table 2. Analysis of CAM Use With Multivariate Logistic Regression

Variable (reference)	Analysis 1 (n = 2,810)			Analysis 2 (n = 2,020)		
	Odds Ratio	95% CI	P	Odds Ratio	95% CI	P
Used chemotherapy (v did not)	2.06	1.75 to 2.43	< .0001	2.24	1.85 to 2.73	< .0001
Seen at a palliative care unit (v a cancer center)	2.29	1.73 to 3.03	< .0001	2.22	1.59 to 3.10	< .0001
Experienced a change in outlook on life (v did not)	1.47	1.25 to 1.73	< .0001	1.40	1.15 to 1.70	.0007
Lung, breast, hepatobiliary cancer (v other cancers)	1.47	1.25 to 1.73	< .0001	1.34	1.10 to 1.62	.0031
≤ 60 years of age (v > 60 years)	1.39	1.18 to 1.64	< .0001	1.32	1.08 to 1.61	.0063
Symptomatic (v asymptomatic)	1.16	0.98 to 1.36	.074	1.23	1.01 to 1.49	.0373
Did not meet patient's needs (v met them)	1.21	1.03 to 1.42	.0234	1.22	1.00 to 1.48	.047
Female (v male)	1.17	0.98 to 1.40	.0764	1.16	0.94 to 1.43	.174
More educated (v less educated)	—	—	—	1.61	1.32 to 1.95	< .0001
Low HADS score for anxiety (v high score)	—	—	—	1.11	0.90 to 1.38	.3227
High HADS score for depression (v low score)	—	—	—	1.02	0.84 to 1.25	.8447

Abbreviation: HADS, Hospital Anxiety and Depression Scale.
 *Analysis 1 was performed with all variables except for education and HADS because there were fewer responses for these variables.
 †Analysis 2 was performed with all variables listed.

Table 3. Types of CAM Used and Perceptions and Attitudes of 1,382 CAM Users

Characteristic	%
Type of CAM used*	
CAM products (Chinese herbs, mushrooms, shark cartilage, vitamins, and so on)	96.2
Qigong†	3.8
Moxibustion	3.7
Acupuncture	3.6
Motive for starting CAM	
Recommendation from family or friends	77.7
Will of patients themselves	23.3
Expectations for CAM use*	
Suppress cancer growth	67.1
Cure	44.5
Symptom relief	27.1
Complementary effects to conventional therapy	20.7
Positive effects	
Yes	24.3
No	6.2
Unclear	69.5
Adverse effects	
Yes	5.3
No	62.2
Unclear	32.6
Obtained enough information on CAM	
Yes	42.7
No	57.3
Heard about CAM use from health professionals	
Yes	15.5
No	84.5
Consulted with doctors about CAM use	
Yes	39.3
No	60.7

NOTE: Unanswered rates were less than 10% in all categories.
 *Questions in which multiple selections of answers were allowed.
 †Component of traditional Chinese medicine that combines movement, meditation, and regulation of breathing to enhance the flow of vital energy (qi) in the body to improve circulation and enhance immune function.

The surveyed cancer population in this study used complementary but not alternative therapies because they were simultaneously treated in conventional medical facilities. However, we could not completely rule out the possibility that they had previously used alternative medicine. Therefore, we used the term CAM in this study.

Although we received more than 3,000 replies, the response rate (52.4%) was a little lower than in previous studies.^{3,6,18,19} This may have introduced bias into our study. However, the patients' privacy was completely preserved and our survey method was the easiest way for the patients to reply to the questionnaire without feeling any pressure. We believe that our survey is helpful for assessing regional research priorities and for comparing the current status of CAM use in studies using a similar mailed-questionnaire method in other countries.

The prevalence of CAM use in cancer patients was significantly higher than that in noncancer patients. Most of the

noncancer patients in this study had benign tumors and attended the cancer centers. Therefore, the noncancer patients in our study represent neither the general healthy population nor patients with benign chronic disease. Indeed, the rate of CAM use in the general population of people suffering from disease in our country was reported to be higher than that of our noncancer patients.²⁰ The prevalence of CAM use in cancer patients was 44.6%. This rate was slightly higher than that found in our previous study (32%) of a single cancer center survey.¹² The prevalence appears to increase each year in our country, as in the Western countries.² CAM user rates were significantly higher in patients undergoing chemotherapy and in patients in PCUs, and these associations were confirmed by multivariate analysis. Chemotherapy is usually delivered to inoperable, advanced, or metastatic cancers with a palliative intent but not a curative intent. In PCUs, there were no conventional treatments with tumor shrinkage as the expected outcome. Patients' relatives or friends often recommended that the patient use CAM products in that situation. In general, medical professionals in PCUs are rather generous in accepting the use of CAM. The percentage of patients whose CAM use had been recommended was approximately two-fold higher in PCUs (19.5%) compared with that in CCs (8.5%). These are probably the primary reasons for the high rate of CAM use in patients undergoing chemotherapy and in PCUs. The multivariate analysis also revealed a close association between CAM use and high educational status, changes in outlook on life, primary cancer site, and younger age. The patients' perception of received conventional treatments and female sex were marginal predictors in our study. Predictors of CAM use have been reported in many previous studies,^{7,8,19} and our data support that these predictors are similar to those in developed countries. With few exceptions, the literature indicates that highly educated patients and younger patients tend to use CAM.

Different predictors are associated with the different types of CAM used. In our surveyed population, the most frequently used CAM was natural products. Oral intake of medications is more likely in patients with lung, breast, and hepatobiliary cancers than in patients with head and neck, GI, and urogenital cancers, taking the sites of disease and the manners of progression into consideration. This is likely to be closely related to the use of CAM products because all of these are oral supplements. The predictors chemotherapy and disease site would therefore be related to the type of CAM used (ie, CAM products). Indeed, this hypothesis was suggested in a previous report in which predictors shifted to include chemotherapy after spirituality and psychotherapy or support groups were excluded from the types of CAM used.⁷ Supplements (herbs or vitamins) were the main types of CAM used by the patients of that limited analysis. Unexpectedly, psychological factors such as anxiety and depression showed no relation to the use of CAM. However, these factors frequently fluctuate during the disease course, as we observed in the process of informed consent.¹⁵ If the HADS had been administered when the patients initiated CAM use, the results would likely be different.

The majority of CAM users in this study took products such as mushrooms, herbs, and shark cartilage. Mushrooms (*Agaricus* and AHCC) were the most frequently used among the products. This was characteristic of our CAM users. The popular types of CAM in Western countries, such as spiritual practice, mind and body therapy, vitamins and special diet, and homeopathy, were rarely used in our country. Such mushrooms are sold in Japan as diet supplements. The providers emphasize their effects on boosting the immune system based on basic experimental findings using cultured human tumor cells, and advertise in many magazines or through the Internet with anecdotal reports of users. No reliable, well-designed clinical trials in cancer patients have been performed with these mushrooms. Nonetheless, many cancer patients used such products hoping for tumor growth suppression (67.1%) and cure (44.5%) rather than complementary effects (20.7%). These mushrooms and other similar natural products are generally expensive. This contributed to the high expenditure on CAM among our users (US \$500 per month on average), compared with that in the Western countries (US \$50 to \$70 per month on average).⁶ The main motive for CAM use was the recommendation of family members or friends. The population of patients who were willing to seek out CAM on their own was unexpectedly small, about one fourth of the users. It has been reported that support group dynamics influence individuals to be more likely to use CAM among breast cancer survivors.⁶ In our study, many patients seemed to be motivated to use CAM by the recommendations of relatives. Friends also offered recommendations on CAM use.

Approximately one fourth of the users experienced positive effects from CAM, even though they all received conventional therapies previously or concurrently. Although it was unclear whether the positive effects were due to the CAM products or the conventional treatments, they nonetheless believed that the CAM was effective. In retrospect, we should have added a question to our questionnaire about the effectiveness of the conventional treatments received. Conversely, most patients reported no adverse reactions to CAM. However, the potential for harmful drug-CAM product interactions exists.²¹⁻²³ Herbs or vitamins can mask or distort the effects of conventional drugs.

This survey revealed that approximately 60% of users started CAM without obtaining enough information about it, and without informing their doctors. This proportion was similar to that in our previous survey.¹² The same issues have been pointed out in many reports from the United States and Europe.^{7,24,25} In our survey, when patients consulted their physicians, 60.3% of the patients were told that they were free to continue using CAM or to stop, whereas 10.5% of the patients were told to continue using CAM and 11.3% of the patients were told to stop. These figures were also similar to the results in our previous study of clinical oncologists.²⁶ When oncologists were asked, 74% of them neither recommended nor prohibited the use of the products. Twelve percent of them encouraged their patients to use CAM products,

and 6% told their patients to stop. It appears that a difficult situation for many oncologists emerges because of the lack of scientific information on CAM. However, physicians should acknowledge that the main reason (56.1%) patients did not inform their physicians of their CAM use was that the physicians did not ask them about it. These results indicate that better patient-physician communication and more reliable information on CAM products are needed. The prevalence of concurrent use of anticancer drugs and CAM products was considerably high (61.8%) in the present study. In our previous survey of oncologists, 83.9% of oncologists had administered anticancer drugs concurrently with CAM products.¹² Nevertheless, our present knowledge of interactions is incomplete, especially regarding anticancer drugs.^{22,23} More research is urgently needed. Oncologists should be aware of these facts, and the use of CAM products should be determined before initiating chemotherapy, especially when using new investigational drugs.

A few limitations of this study must be acknowledged. First, the response rate was somewhat low compared with that of other studies, although it was greater than 50%, as discussed previously. Second, there is no definite evidence that our study population is representative of cancer patients in Japan. It seems impossible to select cancer patients randomly from throughout the entire country. We used the associations of CCs and PCUs in Japan as our survey source. Otherwise, such a large-scale survey could not be performed. These limitations have also been reported in the previous literature,^{7,8} and unfortunately, inconsistencies in measures of CAM and differing patient populations and methodologies (ie, interviews *v* mailed surveys) limit the generalization of studies on CAM use.^{3,4} Third, two questions were deleted from the questionnaire sent to one of the CCs. As a result, about 500 replies on education and religion were lacking. However, the analyses with or without the data from that center achieved similar results. Therefore, this did not significantly affect our conclusions.

Many cancer patients continue receiving oncologic care with standard therapies while pursuing CAM methods. A recent survey regarding the impact of the media and the Internet on cancer patients revealed that 71% of cancer patients actively searched for information, and 50% used the Internet.²⁷ The survey concluded that strategic efforts were needed to provide guidance for patients to help them better interpret such medical information. Oncologists need to be aware of the importance of this issue and of the rationale used to promote CAM. A great need for public and professional education regarding this subject is evident.

Acknowledgment

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Authors' Disclosures of Potential Conflicts of Interest

The authors indicated no potential conflicts of interest.

Appendix

1. What is your disease?

2. When was your disease diagnosed?

Year _____ month _____

3. How old are you?

_____ Years old

4. Please indicate your sex.

Male/Female

5. What about your present daily activity? Please tick the number below.

1) not limited at all, 2) somewhat limited with slight symptoms

3) bed rest more than 50% of the day, 4) bed rest all day

6. Please indicate your level of education.

1) junior high school, 2) high school, 3) college, 4) university, 5) other (_____)

7. Are you committed to any religion?

Yes / No

8. Please indicate all treatments that you have received.

1) surgery, 2) chemotherapy, 3) hormonal therapy, 4) radiation, 5) palliative care

6) others (_____)

9. Please indicate all treatments that you are currently receiving or will receive.

1) surgery, 2) chemotherapy, 3) hormonal therapy, 4) radiation, 5) palliative care

6) others (_____)

10. Has your outlook on life been changed by suffering from this disease?

Yes / No (if yes, how? _____)

11. Did (Do) the treatments you received meet your needs?

Yes / No

12. Have you ever used complementary and alternative medicines (CAM)?

(*CAM includes various therapies as follows: Chinese herbal medicine, other CAM products such as Agaricus, Propolis, Chitosan, and shark cartilage, acupuncture, chiropractic, aromatherapy, homeopathy, imagery, yoga, thalassotherapy, hypnosis, etc.)

Yes / No

If 'yes', please continue to answer the questions below.

If 'no', the questions are finished here. Thank you very much for your cooperation.

13. When did you start CAM?

Year _____ month _____

14. Are you using CAM now?

Yes / No (if no, when did you stop? Year _____ month _____)

15. What kind of CAM do (did) you use?

(continued on following page)

Appendix (continued)

Please state all the names of cancer CAM you use (used), referring to cancer CAM notes*.

16. Why did you start CAM? Please tick the number below.

- 1) recommended by family members or friends, 2) your own free will,
3) recommended from a physician, 4) other ()

17. Did you obtain enough information about the efficacy and safety of CAM before you started it?

Yes / No

18. What did (do) you expect by using CAM? Multiple choices are allowed in this question.

- 1) cure, 2) suppress the progression, 3) improve the symptoms, 4) complementary effects to the present medicine, 5) other ()

19. Did it work?

Yes / No / difficult to judge

20. If 'yes', how effective was it?

21. Did you experience any detrimental effects from CAM?

Yes / No / difficult to judge

22. If 'yes', how detrimental was it?

23. What was the cost to you? Please indicate the mean expenditure per month.

_____ Yen

24. Did your doctor or other medical professionals ask about CAM use?

Yes / No

25. Have you mentioned CAM use to your doctor?

Yes / No

26. If 'yes', how did your doctor respond?

- 1) encouraged you to continue using, 2) advised you to stop using,
3) was neutral about using (neither encouraged nor discouraged),
4) other ()

27. If 'no', why did you not mention it to your doctor?

- 1) Because my doctor never asked me about the topic, 2) Because I thought my doctor would not understand, 3) Because I thought my doctor would disapprove of CAM use, 4) other ()

28. Please answer the next question, if you have received or are receiving chemotherapy.

Have you ever used CAM products and anticancer drugs at the same time? CAM products include Chinese herbs, mushrooms, shark cartilage, etc. which are sold over the counter.

Yes / No

Thank you very much for your cooperation.



1. World Health Organization: WHO traditional medicine strategy 2002-2005. <http://www.who.int/medicines/organization/trm/origtrmmain.shtml>
2. Eisenberg DM, Davis RB, Ettner SL, et al: Trends in alternative medicine use in the United States, 1990-1997. Results of a follow-up national survey. *JAMA* 280:1569-1575, 1998
3. Ernst E, Cassileth BR: The prevalence of complementary/alternative medicine in cancer: A systematic review. *Cancer* 83:777-782, 1998
4. Cassileth BR: Complementary and alternative cancer medicine. *J Clin Oncol* 17:44-52, 1999
5. Schraub S: Unproven methods in cancer: A worldwide problem. *Support Care Cancer* 8:10-15, 2000
6. Boon H, Stewart M, Kennard MA, et al: Use of complementary/alternative medicine by breast cancer survivors in Ontario: Prevalence and perceptions. *J Clin Oncol* 18:2515-2521, 2000
7. Richardson MA, Sanders T, Palmer JL, et al: Complementary/alternative medicine use in a comprehensive cancer center and the implications for oncology. *J Clin Oncol* 18:2505-2514, 2000
8. Palliat O, Avitzour M, Peretz T, et al: Determinants of the use of complementary therapies by patients with cancer. *J Clin Oncol* 19:2439-2448, 2001
9. Richardson MA: Research of complementary/alternative medicine therapies in oncology: Promising but challenging. *J Clin Oncol* 17:38-43, 1999
10. Jacobson JS, Workman SB, Kronenberg F: Research on complementary/alternative medicine for patients with breast cancer: A review of the biomedical literature. *J Clin Oncol* 18:668-683, 2000
11. Ernst E: The role of complementary and alternative medicine in cancer. *Lancet Oncol* 1:176-180, 2000
12. Eguchi K, Hyodo I, Saeki H: Current status of cancer patients' perception of alternative medicine in Japan: A preliminary cross-sectional survey. *Support Care Cancer* 8:28-32, 2000
13. Mathijssen RH, Verweij J, de Bruijn P, et al: Effects of St. John's wort on irinotecan metabolism: St. John's Wort—More implications for cancer patients. *J Natl Cancer Inst* 94:1247-1249, 2002
14. Kugaya A, Akechi T, Okuyama T, et al: Screening for psychological distress in Japanese cancer patients. *Jpn J Clin Oncol* 28:333-338, 1998
15. Hyodo I, Eguchi K, Takigawa N, et al: Psychological impact of informed consent in hospitalized cancer patients: A sequential study of anxiety and depression using the hospital anxiety and depression scale. *Support Care Cancer* 7:396-399, 1999
16. Zigmund AS, Snaith RP: The hospital anxiety and depression scale. *Acta Psychiatr Scand* 67:361-370, 1983
17. Lee A, Langer R: Shark cartilage contains inhibitors of tumor angiogenesis. *Science* 221:1185-1187, 1983
18. Cassileth BR, Lusk EJ, Strouse TB, et al: Contemporary unorthodox treatments in cancer medicine: A study of patients, treatments, and practitioners. *Ann Intern Med* 101:105-112, 1984
19. Begbie SD, Kerest es ZL, Bell DR: Patterns of alternative medicine use by cancer patients. *Med J Aust* 165:545-548, 1996
20. Yamashita H, Tsukayama H, Sugishita C: Popularity of complementary and alternative medicine in Japan: A telephone survey. *Complement Ther Med* 10:84-93, 2002
21. Matthews HB, Lucier GW, Fisher KD: Medicinal herbs in the United States: Research needs. *Environ Health Perspect* 107:773-778, 1999
22. Ernst E: Herb-drug interactions: Potentially important but woefully under-researched. *Eur J Clin Pharmacol* 56:523-524, 2000
23. Marcus DM, Grollman AP: Botanical medicines: The need for new regulations. *N Engl J Med* 347:2073-2076, 2002
24. Risberg T, Lund E, Wist E, et al: Cancer patients use of nonproven therapy: A 5-year follow-up study. *J Clin Oncol* 16:6-12, 1998
25. Burstein HJ: Discussing complementary therapies with cancer patients: What should we be talking about? *J Clin Oncol* 18:2501-2504, 2000
26. Hyodo I, Eguchi K, Nishina I, et al: Perceptions and attitudes of clinical oncologists on complementary and alternative medicine: A nationwide survey in Japan. *Cancer* 97:2861-2868, 2003
27. Chen X, Siu LL: Impact of the media and the internet on oncology: Survey of cancer patients and oncologists in Canada. *J Clin Oncol* 19:4291-4297, 2001

緩和医療学

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放射線科医がはじめた緩和医療

本家好文

はじめに

「放射線治療を担当する医者は、どうせ放射線の“かけ屋”だ。患者からの苦情を聞くのは自分たちだし、治療方針には口を挟まないで欲しい」。約25年前に、ある医師からいわれた言葉です。いまでも忘れられない言葉ですが、筆者が「チーム医療」が重要なことを実感し、ベッドサイドで「患者さんの声に耳を傾けることの大切さ」を認識させられた言葉でもあります。

ベッドサイドで患者さんの声を聴きつづけたことから、痛みをとることの大切さを学び、放射線治療医から緩和医療を専門とする医師に転身したといっても過言ではありません。

放射線治療医として

「何もしないわけにはいかないし、放射線でもかけておくか」。これも放射線治療医時代の自分にとっては、忘れられない言葉です。放射線治療には臓器の形態を保って機能が温存できることや、身体への負担が小さいといったメリットがあります。喉頭癌や舌癌では手術よりも放射線治療で機能を温存することで、患者さんのQOL (quality of life) が維持されることはよく知られています。

最近では、乳癌治療で乳房温存手術と放射線を用いることによって乳房を温存し、美容面や精神面でよい結果が残せるようになりました。機能が温存できるだけでなく、負担の軽い放射線治療の役割は、今後ますます大きくなることが予測されています。

しかし、一般的には放射線治療というと「副作用が強い」ことばかりが強調されて、十分に活用されていないのが現状です。ひと昔前までは、手術ができない患者さんに「仕方なく」実施することや、再発や転移巣への治療を依頼されることが多かったのです。

骨転移の痛みに対しては、放射線治療をおこなうことによって身体が動かせるようになったり、オピオイド鎮痛剤を減量できるといったメリットがあります。しかし、以前には治癒が望めない状態で「痛みをとるためだけ」の治療に対して、放射線治療医も「姑息的放射線治療」と称して、あまり関心をもってきませんでした。最近になって苦痛の緩和を目的とする「緩和的放射線治療」の大切さが、ようやく理解されるようになりました。

大学病院から第一線病院へ

卒業して3年目からの2年間、放射線医学総合研究所（放医研：千葉市）で放射線治療の基

礎を学ぶ機会を得ました。その後、広島に戻ってからの5年間は地域のがん治療医に放射線治療を正しく理解してもらい、手術療法や化学療法と連携して集学的治療を実践することに力を注ぎました。不治の病といわれていた「がん」を放射線で治すことにエネルギーを注いだ時期でもありました。

卒業して10年目にあたる1985年に、厚生連広島総合病院に新しく放射線治療部門が設立されて赴任しました。放射線治療医は患者さんを診ないといわれたことへの反発心から、広島総合病院では放射線治療中の患者さんは自らが主治医となって治療をおこないました。

大学病院の放射線治療部門では、完全に治癒できる可能性のある患者さんも数多くおられました。しかし、第一線病院では8～9割の患者さんたちは、紹介された当初から治癒が望めない進行がんという状況でした。

大学病院時代には、患者さんやご家族の声が届きにくい立場にいましたが、再び第一線病院に勤務することになり、主治医として直接患者さんやご家族の声を聴く機会が増えました。がん罹患したことによる不安や恐怖だけでなく、痛みが改善しないことに対する辛い気持ちを毎日聴くようになりました。

その当時から、患者さんのところへうかがうときには、必ず腰をかけて座って話し合うように心がけました。最初は照れ臭くて抵抗がありましたが、じっくり患者さんの話を「聴く」ことは、患者さんに大変喜ばれたのでいまでもつづけています。

疼痛治療の重要性

多くの医師は、自分の将来の方向性を左右するような忘れられない患者さんとの出会いを体験しています。筆者にとっては15年前に出会った50歳代の乳癌患者さんとの出会いが、緩和医療を志すきっかけになりました。

まだ硫酸モルヒネ徐放剤が発売されて間もないころ、自分自身のモルヒネ使用方法に関する知識が未熟で経験が不足していたために、十分な量のモルヒネを使わず「痛みと向き合う毎日」を余儀なくさせてしまいました。その結果、最終的には病棟から投身自殺をされてしまい、スタッフも自分自身も大きなショックを受けました。その患者さんの体験をきっかけにして、病棟内で医師・看護師・薬剤師とで疼痛治療の勉強会をはじめました。勉強会を通じて学ぶことによって、徐々に痛みを抱えた患者さんへの治療が上手くいくようになりました。その後、疼痛治療の勉強会を病棟から病院全体の「院内ターミナルケア研究会」に発展させていきました。

病院内部で研究会を開催することによって、疼痛治療に対する病院内の医療者の意識が大きく変わりました。モルヒネの具体的な使用方法を学ぶことによって、病院全体のがん性疼痛治療のレベルが明らかに改善しました。

病院から地域へ

さらに広島県内の医療機関にも声をかけて「ターミナルケアを考える会・広島」を発足させました。この会は、自分にとって緩和医療をめざす基盤となる研究会となっています。発足以来10年以上が経過していますが、「継続は力なり」の言葉を信じていまもつづけています。会

の活動は地域のメディアにも注目されるようになり、社会的な支援を受けたことも大きな励みになりました。

「ターミナルケアを考える会・広島」がスタートした1993年には、ホスピスをみたことがありませんでした。そこでデーケン氏（元上智大学）の主催するヨーロッパのホスピス視察ツアーに参加して、はじめて英国のホスピス施設を見学して基本的な考え方に接したり、全国から集まった人たちとの意見交換ができたことや、英国の大学医学部で「緩和医療学」が講座として確立していることを知ったことなどが、自分を「緩和医療」に向かわせる大きな刺激になりました。

放射線治療と緩和医療の両立

緩和ケアへの関心が高まるにつれて、逆に放射線治療への関心が徐々に薄れていく自分を感じていました。緩和医療と放射線治療とを両立させるむずかしさを悩んでいたときに、国立呉病院（現：独立行政法人国立病院機構呉医療センター）に緩和ケア病棟が開設され、担当医師を探しているという話が舞い込みました。放射線治療医として全身の悪性腫瘍にかかわってきた25年間の経験を生かしながら、緩和医療を専門にする医師に転身することを決意しました。

2000年1月からは国立呉病院緩和ケア病棟に勤務しました。一般病棟に勤務しているときには、医師と看護師が患者さんのケアについて10分間のカンファレンスをもつことも簡単ではありませんでしたが、緩和ケア病棟ではカンファレンスを開催できることが当たり前という状況でした。痛みを緩和するためにはどんなアプローチが必要か、鎮痛剤は有効か、副作用の問題は生じていないか、身体的痛み以外の問題を抱えていないかといったことを話し合っていると、チーム医療を実践していることを実感できました。

しかし一方で、緩和ケア病棟に勤務していると、一般病棟の感覚とのずれを感じることもあって戸惑いもありました。緩和ケア病棟に入院するのだから、積極的な治療をおこなうことは認めないといった雰囲気を感じることもありました。患者さんの心理状態を考えると、自分が積極的ながん治療が困難で緩和ケアの対象となる病状であることは、説明を受けて理屈では理解していても、何とかならないだろうかという期待感をもっていることも多いのです。そのことを認めないような姿勢で入院の判断をすることもあり反省させられました。

現在のがん医療では、積極的ながん治療の効果が得にくくなった時期の患者さんへの援助が欠落しているように感じます。緩和ケア病棟や在宅ケアという選択をする前段階の患者さんで、将来の方向性について一番迷っている時期の患者さんたちへの支援が必要だと思います。そのような時期の患者さんに対して緩和医療がもっとかかわる必要性があると感じています。

広島県緩和ケア支援センター

最近の5年間に広島県に8つの緩和ケア病棟が整備されました。最も新しく2004年9月に開設したばかりの広島県緩和ケア支援センターでは、県内8番目の緩和ケア病棟の運用だけでなく、広島県全体の緩和ケアの推進を目標とした緩和ケア支援室の運用をおこなっています。

緩和ケア支援室の事業としては、地域で独自に緩和ケアを担う人材を育成するための教育研修事業、患者さんや医療関係者から直接相談を受ける電話相談や面談窓口、また直接県内の各

地域との連携を図り具体的な援助をおこなうアドバイザー派遣事業や、在宅緩和ケアを推進するための「デイホスピス」事業などをおこなっています。

少し長期的な展望で、地域の在宅緩和ケアを中心とした緩和ケアの推進に取り組んでいく予定です。

おわりに

緩和医療は医療の分野ではいぜんとしてマイナーな分野で、決して十分な理解が得られているとはいえない状況にあります。しかし、徐々に関心が高まっていることも事実です。今後とも、一人ひとりの患者さんを苦痛から解放することを積み重ねながら、緩和医療の重要性について啓発活動をつづけていきます。

■報 告

家族歴調査のシステム化による家族性腫瘍相談室の運営

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■報告

家族歴調査のシステム化による家族性腫瘍相談室の運営

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当院では、入院患者を対象とした家族歴調査をシステム化し、そのデータに基づき家族性腫瘍相談室を運営している。家族性腫瘍の診断基準にあてはまる症例、強く疑う症例は、相談室内のデータベースに入力すると共に、外来・入院主治医を通じて家族性腫瘍相談外来を紹介する。その後、患者の希望に応じて家族性腫瘍相談外来にて相談医がカウンセリングを行っている。必要に応じ遺伝子診断を行う体制を整え、診断後の発端者の精神的支援、近親者への医療的配慮にも努力している。2000年11月から2004年1月までに行った家系調査は2,448件であり、家族性腫瘍と考えられたのは59人であった。カウンセリングは25人、遺伝子診断は10人に行われ、そのうち5人に病的変異を確認した。また、パンフレットやインターネットを利用した情報発信・啓蒙活動にも尽力している。こうした取り組みは将来、家族性腫瘍の診療・研究の中心になってゆくと思われる。

キーワード：家族性腫瘍、家族歴、情報管理、カウンセリング、遺伝子診断

I. はじめに

家族性腫瘍の診療において、家族歴の調査は重要である。家族歴は特定の疾患に対する家系のリスクを示すものであり、家系構成員の疾患に対する易罹患性を推測する医療情報として重要である。一方で、遺伝性疾患に対する偏見、差別を受けることがないように個人情報としての慎重な取り扱いが必要である。過去にはこういった家族性腫瘍に関する家族歴の聴取と管理は主治医の個人的努力にゆだねられていた。そのため、担当医の転出に伴い引き継いだ担当医に家族歴情報が正確に伝達されないなどの問題が生じていた。家族歴情報に基づいた診療は、患者本人だけでなくその血縁者が対象となることから、地域に根ざして経時的に行う必要がある。よって個人情報保護の観点からも家族性腫瘍の診療記録は、個々の患者の主治医レベルではなく、厳重な管理の下に医療機関の責任下で管理・保管することが望ましいと考える。

当院では2000年11月から入院患者を対象とした家族歴調査を病院全体で行い、その情報を家族性腫瘍相談室が一元管理している。このことによって、主治医の転出に伴う家族歴情報の喪失を防ぎ、また十分な安全管理下に家系情

報を扱うことができるようになっていく。本報告では、このような四国がんセンター家族性腫瘍相談室における家族歴管理システムに関し、報告する。

II. 方法

1. 家族性腫瘍相談室

当院では既報¹⁾のごとく、2000年11月に家族性腫瘍相談室を立ち上げた。2004年1月現在の運営者は、医師5名、病歴管理者2名である。医師は消化器内科、消化器外科、乳腺外科の医師で構成され、一般診療を兼任している。病歴管理者の1名は家族歴の管理を行い、1名はホームページの管理・作成を行っている。当相談室では、月1回の定期カンファレンスを行い、症例検討を行っている。また、各種セミナーに参加し、家族性腫瘍に関するホームページの作成、パンフレット作成などによる啓蒙活動を積極的に行っている。

2. 家族歴調査

当院では、入院患者全員を対象とした家族歴調査を行っている。調査は本人および第一度および第二度近親者を対象に行う。家族歴調査票はあらかじめ入院カルテにはさみこんでいる。家族歴の聴取は各診療科の主治医が行う。家族歴調査票は2枚複写になっており、1枚は一般診療カルテ用、1枚は家族性腫瘍相談室用である。家族性腫瘍相談室用の家族歴調査票は各病棟詰所の回収箱に提出され、病歴管理者が定期的に回収している。

3. 家族歴調査票の管理

病歴管理者は回収した家族歴調査票に記入項目の漏れ、

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