Original Article

The Views of Patients with Hematological Malignancies About Complementary and Alternative Medicine

Hematolojik Maligniteli Hastaların Tamamlayıcı ve Alternatif Tıp Hakkındaki Görüşleri

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ABSTRACT

Introduction: Complementary and alternative medicine (CAM) is often used by cancer patients, but not many studies had been published on the prevalence of CAM use in patients with hematological cancers. This study aims to determine the prevalence of CAM and type of CAM used in this group of patients.

Methods: Patients who were followed up in Ankara Oncology Hospital hematology and stem cell transplant clinic were asked some questions about CAM, art therapy and spiritual support.

Results: A total of 238 patients participated. The prevalence of CAM use was 29,4%. The most common types of CAM used is phytotherapy. There is no significant association of CAM use with age and gender. A higher rate of CAM use was observed in those with a low education level. It was found that those living in the provincial centers also used these treatments at a higher rate.

Discussion and Conclusion: It is noteworthy that the use of CAM is less common in patients with hematologic cancer compared to other studies, patients are confused about CAM and want to get information from their physicians. It was observed that they were also interested in art therapy and spiritual support therapies.

Keywords: Complementary and alternative medicine, hematological malignancies, art therapy, spiritual support

ÖZET

Giriş ve Amaç: Tamamlayıcı ve alternatif tıp (TAT), kanser hastaları tarafından sıklıkla kullanılmaktadır, ancak hematolojik kanserli hastalarda TAT kullanımının yaygınlığı hakkında çok fazla çalışma yayınlanmamıştır. Bu çalışma, bu hasta grubunda kullanılan TAT prevalansını ve kullanılan TAT tipini belirlemeyi amaçlamaktadır

Yöntem ve Gereçler: Ankara Onkoloji Hastanesi hematoloji ve kök hücre nakli kliniğinde takip edilen hastalara TAT, sanat terapisi ve manevi destek ile ilgili bazı sorular soruldu

Bulgular: Toplam 238 hasta katıldı. TAT kullanım yaygınlığı %29,4 idi. Kullanılan en yaygın TAT türleri fitoterapidir. Yaş ve cinsiyet ile TAT kullanımı arasında anlamlı bir ilişki yoktur. Eğitim düzeyi düşük olanlarda daha yüksek TAT kullanım oranı gözlendi. İl merkezlerinde yaşayanların da bu tedavileri daha yüksek oranda kullandıkları belirlendi.

Tartışma ve Sonuç: Hematolojik kanserli hastalarda TAT kullanımının diğer çalışmalara göre daha az olduğu, hastaların TAT konusunda kafalarının karıştığı ve hekimlerinden bilgi almak istedikleri dikkat çekicidir. Sanat terapisi ve manevi destek terapilerine de ilgi duydukları gözlemlendi.

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Anahtar Kelimeler: Tamamlayıcı ve alternatif tıp, hematolojik maligniteler, sanat terapisi, manevi destek

Introduction

For centuries, Complementary and alternative medicine (CAM) has been used in various diseases and in recent years, its popularity especially among cancer patients has been increasing. CAM is defined as "a group of various medical and health interventions, practices, products or disciplines that are not generally considered as a part of traditional medicine"[1]. The use of CAM is common, but its potential positive and negative impacts on patient care is not well understood by patients or healthcare providers. It has been demonstrated that most of the physicians are not discussing the use of CAM with their patients in their daily practice. In a previous study, it has been revealed that 63% to 72% of patients who received concurrent conventional and CAM therapy did not disclose CAM use to their physicians[2]. The high rate of CAM use was shown to be related with female gender, young age and high education level [3,4]. The rate of CAM use seems to be the highest in hematological cancer patients, along with breast, lung and brain cancer patients[5].

Although there are many data on the use of alternative medicine methods in the oncological patient group, the number of studies in patients with hematological malignancies is few. In this respect, it is thought that our study can contribute to the literature. However, there are some limitations of our study due to the heterogeneity of the patient group, and more detailed information can be obtained when working with groups containing more patients.

The use of herbal medicines by patients with cancer may adversely affect traditional anticancer treatments. While more than 35% of cancer patients in the United States report using herbal medicine while chemotherapy treatment continues, this rate exceeds 50% in developing countries[6]. Apitherapy is the science and art of protecting health by using honey, bee pollen, propolis, royal jelly and bee venom obtained from honey bee hives. Acupuncture services are available in many major cancer centers in the United States and are referenced to control nausea and vomiting in patients.

It is known that herbal ingredients can play an important role in cancer treatment by suppressing the antitumor activity pathway or bioactivation of the carcinogen[7]. There are many medicinal plants / products that are beneficial to health and also have antitumor, antimicrobial, antibacterial and antioxidant structures[8]. Turmeric is promoted as an alternative cancer treatment.

Bone marrow transplantation (BMT) is an important treatment option for a various kind of both benign and malignant hematological diseases, furthermore, in the recent years BMT has been used to treat some kinds of metabolic and immunological diseases. Bone marrow transplantation needs a multi-disciplinary approach involving cooperation of a team involving hematologist, enfection specialist, pharmacist, certificated nurses, apheresis technicians and psychologist. Recent articles recommend involving an art therapist in the transplant team. Art therapy can significantly contribute to the physical, psychological and social support of the transplant recipients. In addition, patients in the hematology ward usually receive intensive chemotherapies therefore the length of hospital stay is usually long and art therapy may also be beneficial in this group of patients[9].

Table 1: Socio-demographic data of the patients

Parameters		N(%)
Gender	Male	135(56.7)
	Female	103(43.3)
Age	<40 year	109(45.8)
	40-60 year	76(31.9)
	>60 year	53(22.3)
Educational Level	Primary education	134 (56.3)
	High school	51(21.4)
	University	53(22.3)
Occupation	Civil servant	15(6.3)
	Private sector	32(13.4)
	Worker	34 (14,3)
	Housewives	47(19.7)
	Retired	24(10.1)
	Student	11(4.6)
	Not employed/not disclosed	75 (31,5)
Place of residence	City center	127(53.4)
	District center	62(26.1)
	Village and towns	49(20.5)

Table 2: Types of complementary and alternative medicine used by hematological cancer patients

Types of CAM	N(%)
Phytotherapy	45(18.9)
Leech therapy	8(3.4)
Cupping therapy	8(3.4)
Vacuum therapy	17(7.1)
Hypnosis	3(1.3)
Apitherapy	10(4.2)
Osteopathy	5(2.1)
Reflexology	3(1.3)
Ozone therapy	6(2.5)
Acupuncture	5 (2.1)

Table 3: Details of the herbal agents used in alternative medicine

Types of CAM	N(%)
Black seed	37 (15.5)
Turmeric	25 (10.5)
Reishi mushroom	7 (2.9)
Bee pollen-milk	32 (13.4)
Barley yeast	2 (0.8)
Goat horn	31 (13)
Others	13 (5.5)

National guidelines recommend evaluating and supporting the patients' spiritual concerns in high-quality palliative and supportive cancer care[10]. Although providing spiritual support to cancer patients reduces medical costs, it is not widely used[11].

Material and Methods

Patients who were followed up in Ankara Oncology Hospital hematology and stem cell transplant clinic were asked some questions about alternative and complementary medicine, art therapy and spiritual support.

The analyses were processed with IBM SPSS software v18 (SPSS Inc., Chicago, IL). The descriptive statistics were applied to present data. The categorical data were displayed as percentage and the numerical data were displayed as median (min-max). Chi-square test was used to assess relation between categorical variables. P values ≤ 0.05 were considered statistically significant.

Results

Patients diagnosed with hematological cancer with follow-up in Hematology and Stem Cell Transplant Clinic in Ankara Oncology Hospital were included in the study. The demographic information of 238 patients included in the questionnaire is presented in Table 1.

The patients were asked whether they used CAM methods such as phytotherapy, leech therapy, cupping therapy, vacuum therapy, hypnosis, apitherapy, osteopathy, reflexology, ozone therapy, and acupuncture, and their answers are summarized in Table 2.

While 45 of the patients (18.9%) stated that they used herbal agent for CAM previously, 35 (14.7%) stated that they used more than one herbal agent. The patients were asked whether they used black seed, turmeric, reishi mushroom, bee pollen milk, barley yeast, and goat horn, and their answers are summarized in Table 3.

Table 4. Awareness, Sources of information, Concerns and thoughts about complementary and alternative drugs

Aspects		N(%)
Awareness	Have you ever heard of alternative and complementary medicine?	184 (77,3)
Sources of information	Family and friends	98(41.2)
	Television	73 (30.7)
	Internet	84 (35.3)
	Others	14 (5.9)
Concerns	I don't think it's beneficial	33 (13.9)
	I believe that it would have a detrimental effect on my treatment	37 (15,5)
	Unable to access accurate and reliable information	85 (34,3)
	Others concerns	194 (81,5)
Suggestions	Do you prefer your doctor to provide you information about it?	144 (60,5)
	Do you prefer to receive alternative therapies under the doctor's supervision?	30 (12,6)
Art Therapy	Have you ever joined?	16 (6,7%)
	Would you like to join?	76 (31,9%)
Spiritual Support/Care	Have you ever received?	38 (16%)
	Would you like to receive?	115(48,3%)

Table 5: Alternative Medicine awareness and usage in patients

Parameters		Awareness, N(%)	Usage, N(%)	P value
Gender	Male	100 (74,1)	40 (29,6%)	0,121;0,93
	Female	85 (82,5%)	30 (29,1%)	
Age	<40 year	83 (76,1%)	28 (25,7%)	0,774; 0,452
	40-60 year	59 (77,6%)	26 (34,2%)	
	>60 year	43 (81,1%)	16 (30,2%)	
Educational Level	Primary education	95 (70,9%)	33 (24,6%)	0,01*; 0,134
	High school	42 (82,4%)	20(39,2%)	
	University	48 (90,6%)	17(32,1%)	
Occupation	Civil servant	13 (86,7%)	4(26,7%)	0,745; 0,474
	Private sector	27 (84,4%)	9(28,1%)	
	Worker	24 (70,6%)	9(26,5%)	
	Housewives	36 (76,6%)	12(25,5%)	
	Retired	20 (83,3%)	12(50%)	
	Student	9 (81,8%)	3(27,3%)	
	Not employed/not disclosed	56 (74,7%)	21(28%)	
Place of residence	City center	105 (82,7)	41 (32,3%)	0,044*;0,467
	District center	47(75,8%)	15 (24,2%)	
	Village and towns	27(64,3%)	11 (26,2%)	

The analyses were made by chi-square. *p value<0,05

The questionnaire also included questions about the patients' awareness about CAM, sources of information, and concerns. The answers given by the patients to these questions are summarized in Table 4. The distribution of CAM awareness and use according to the demographic data of the patients was evaluated and the results are summarized in Table 5. A higher rate of CAM use was observed in those with a low educa-

tion level. It was found that those living in the provincial centers also used these treatments at a higher rate.

While 16 (6,7%) of the patients stated that they participated in the art therapy for patients with hematological cancer in the hospital, 76 (31,9%) stated that they wanted to participate. Again, while 38 (16%) of the patients stated that they benefited from the spiritual support service for patients with hematological cancer, 115 (48,3%) stated that they viewed the spiritual support service positively.

Discussion

Studies show that cancer patients use CAM treatments more frequently[12]. It is more common especially in patient groups who have had their illnesses for a long time and traditional medical treatment failed[13]. Complications due to severe chemo-therapeutic drugs are common in patients with malignant hematological diseases. Patients can apply different CAM methods to reduce the discomfort caused by these complications[14].

In contrast to higher rates in the literature with about 30–60% of the oncology patients using CAM[15], we found CAM use only in 29,41% (70/238) of the patient sample. In another study, Perlman et al. reported that CAM use was even higher (75.2%) in patients diagnosed with cancer in the USA[16]. The prevalence of any CAM use in pediatric cancer patients based on 20 articles reported on 2871 children studied, prevalence rates ranged from 12% to 91%, while 14 articles reported prevalence rates between 20% and 60%[17].

The use of CAM in cancer patients may also be related to ethnicity[18]. The prevalence of CAM use in Asian countries appears to be higher than in western countries. For example, the CAM prevalence of use, some studies 61% in Turkey[19], 60% in Palestine[20], 55% in Singapore[21] and 93.4% in China[22]. Although the literature suggests that CAM users are mostly women and younger, in our study it was observed that there was no difference in the use of CAM according to gender and age groups[23]. While CAM users in the same study had higher education levels, our study found higher usage rates in patients with lower education levels[23].

It was seen that phytotherapy was widely used similar to the literature[24]. In a study conducted in Malaysia, the prevalence of CAM use was 70.2%. The most common CAM therapies used were bio-based treatments (90.2%) containing vitamin supplements (68.6%) followed by herbs and folk remedies (58%)[25]. The use of CAM treatments such as acupuncture and homeopathy seems to be more popular in western societies[26]. In this study conducted in Malaysia, the most common reason for using CAM was to improve the immune system (57%), then heal the underlying cancer (24%), reduce treatment-related side effects (14.0%), and prolong survival (10%)[25]. Most of the patients (65%) felt they had enough information about CAM treatments and 94% felt that CAM use did not have any side effects[25]. In our study, the patients were not asked questions about why they used CAM.

The patients stated that similar to other studies in the literature, they obtained the information about CAM with their family members and friends through media products such as television and the internet[27]. Gan et al. in their study, most of the patients (83%) stated that they received information about CAM treatments from their family and friends, and 11% from the media, including the internet. Most of the patients (65%) agreed that CAM was effective. Only 2.3% of the total patients using CAM thought it to be ineffective[25]. In our study, while 13.9% of the patients thought that CAM treatments would not be beneficial, 15.5% had concerns that they would affect their treatment negatively. While 34.3% of the

patients expressed their concerns due to their inability to access reliable information, 60.5% of them stated that they were willing to be informed about CAM by their own doctors.

In a study conducted in Italy, 54 cancer patients were given 4-5 sessions of art therapy for 40 minutes 2 days a week while continuing their chemotherapy treatments, and 51 patients participating in the study defined their experience as beneficial[28]. In our study, 6.7% of the patients stated that they had participated in art therapy before, and 31.9% stated that they wanted to participate in art therapy. In a study conducted at Akdeniz University, 48 cancer patients were given art therapy, and their depression scales and global quality of life were examined, and a statistically significant improvement was found compared to the control group[29].

In a study involving 101 cancer patients undergoing chemotherapy in Brazil, it was observed that spiritual support reinforces that it is an important strategy in dealing with cancer[30]. In a clinical study conducted by Moeini et al. To determine the effects of a supportive spiritual care program on the anxiety of patients with leukemia, there was no significant difference between the two groups before the program, while the average post-program anxiety score was found to be lower in the experimental group than in the control group (P <0.01)[31]. In our study, 16% of the patients stated that they had participated in spiritual support therapy and 46.3% stated that they wanted to participate in spiritual support therapy.

Conclusion:

This study demonstrates the prevalence of use of CAM in patients with hematological cancers and their concerns. The most common type of CAM is phytotherapy. Therefore, it is important that treating physicians take time to question the use of CAM and to monitor any possible interaction. Studies have shown the benefit of art therapy and spiritual support units not only in end-stage patients but also in patients undergoing treatment. Art and spiritual support therapies added to the treatment of patients with hematological malignancies whose chemotherapy continues may provide additional benefits in coping with cancer.

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