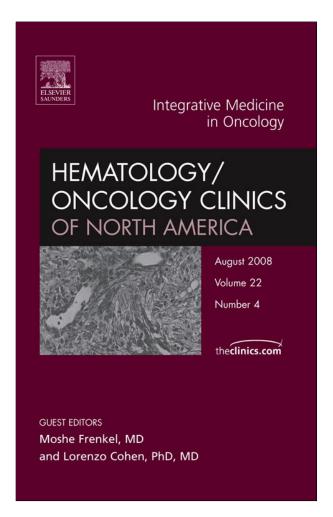
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Preface



Moshe Frenkel, MD Lorenzo Cohen, PhD, MD Guest Editors

omplementary and alternative medicine has been defined by the National Center for Complementary and Alternative Medicine and major U.S. surveys as "...diverse medical and healthcare systems, practices, and products that are not presently considered to be part of conventional medicine" [1]. Complementary therapies include mind-body approaches (such as meditation, guided imagery, music, art, and other behavioral techniques), energy-based therapies (such as yoga, tai chi, qigong, Reiki, and healing touch); body-manipulative approaches (such as chiropractic and massage), alternative medical approaches (such as traditional Chinese medicine, homeopathy, and Ayurveda), and biologic based approaches (such as those centered on nutrition, herbs, plants, and animal, mineral, or other products). Several different specialty health care providers offer complementary and alternative medicine therapies, which may include physicians, nurses, physical therapists, psychiatrists, psychologists, chiropractors, massage therapists, and naturopaths who are operating within the guidelines of their licenses or accrediting organizations.

The terms *alternative, complementary*, and *conventional* focus on treatment modalities. In the last few years, the term *integrative medicine* or complementary and integrative medicine (CIM) has become more prevalent in medical academia. Integrative medicine is more about a philosophy of medical practice. The Consortium of Academic Health Centers for Integrative Medicine has defined this term as "the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing" [2]. There is a tremendous interest and use of CIM nationwide, and among patients and families touched by cancer, the use is higher than in the general population. In some studies, over 30% of patients and up to 83% of patients who have cancer use CIM [3,4], and most studies estimate that at least 50% of patients use CIM at some point in their journey.

In most cases, people who use CIM are not disappointed or dissatisfied with conventional medicine, but they want to do everything possible to regain health and to improve their quality of life [5-10]. Patients use CIM to reduce side effects and organ toxicity, to improve quality of life, to protect and stimulate immunity, or to prevent further cancers or recurrences.

The extensive use of CIM is a challenge to health care professionals who typically have limited knowledge of this "new" area and who have limited time to reeducate themselves. At the same time, patients can become frustrated and are not understood if they cannot discuss CIM with their physician. This bilateral frustration can result in a communication gap, which damages the patientphysician interaction. The most common reason patients give for not bringing up an interest in or use of CIM is that it just never came up in the discussion; that is, no one asked them, and they did not think it was important. Patients may fear that the topic will be received with indifference or will be dismissed without discussion [11,12], and health care professionals may fear not knowing how to respond to questions or may fear initiating a time-consuming discussion. As a result, it is estimated that 38% to 60% of patients who have cancer are taking complementary medicines without informing any member of their health care team [13,14]. This lack of discussion is of grave concern, especially for ingestible substances.

Physicians' failure to communicate effectively with patients about CIM may result in a loss of trust within the therapeutic relationship. In the absence of physician guidance, patients may choose harmful, useless, ineffective, and costly complementary therapies, when effective CIM therapies may exist. The erosion in trust caused by the lack of communication also can lead to decreased compliance with conventional medicine and certainly refusal to comply with the physician's advice about CIM use. Poor communication also may lead to a patient's diminished autonomy and sense of control over their treatment, thereby interfering with the self-healing response [11,12].

While scientific and evidence-based thinking is fundamental to contemporary medical practice, patients often do not reason in this way. A physician's failure to recognize this interferes with their ability to address the unspoken needs of patients. Psychological, social, and spiritual dimensions of care may be ignored if physicians cannot adapt to the individual needs of the patient or do not provide care with sensitivity. When physicians are faced with unfamiliar information about CIM therapies, they may feel "de-skilled" by being forced outside their medical specialty. This discomfort can lead to defensiveness and a breakdown in communication with the patient. In contrast, the physician who is receptive to patient inquiries and aware of subtle, nonverbal messages can create an environment in which a patient feels protected and can openly discuss potential CIM choices [11,15].

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As CIM practice in cancer care grows and patients are exposed to non-biomedical therapeutic models, oncology clinicians increasingly are faced with patients requesting (or expecting) discussion about such issues in medical consultations. The increased use of CIM in cancer care is raising important challenges and questions about the oncology clinician's knowledge of and attitude toward CIM, the approaches to CIM in oncology consultations, and the implications for patient care. Certainly, existing research suggests that the vast majority of cancer patients desire communication with their doctors about CIM [16], and there is general agreement within the oncology community that oncologists must be aware of CIM use and be able to guide their use of all therapeutic approaches in order to provide effective patient care [17,18]. It is the health care professional's responsibility to ask patients about use of complementary medicines. Optimally, the discussion should take place before the patient starts using a complementary treatment. A number of strategies can be used to increase the chance of a worthwhile dialogue. Underlying these specific strategies should be an open attitude combined with a willingness to review evidencebased references and consult with other health care professionals [19].

Although applying the concept of integrative medicine to cancer care is still in its infancy, a number of comprehensive cancer centers in the United States are trying to put this concept into practice under the term "integrative oncology". As a result of this growing interest in integrative medicine in cancer care, the Society for Integrative Oncology (SIO) was established in 2003. In the SIO mission statement, the society describes itself as being dedicated to studying and facilitating cancer treatment and recovery through the use of integrated complementary therapeutic options, including natural and botanical products, nutrition, acupuncture, massage, mind-body therapies, and other complementary modalities [20]. The Journal of the Society for Integrative Oncology is a peer reviewed, Medline indexed journal dedicated to publishing original research and educating within the filed of integrative oncology.

In this issue of the *Hematolgy/Oncology Clinics of North America*, we have assembled a diverse set of articles from world renowned experts in integrative medicine and integrative oncology. When reading this issue you will be exposed to the evidence, theories, research challenges, and philosophy of integrative oncology.

Dr. Hardy from the University of California, Los Angeles discusses the most commonly used CIM in cancer care: nutritional supplements. The controversy surrounding this topic in cancer care is clarified and reviewed. Dr. Hardy provides a very comprehensive review of possible beneficial supplements that can be considered in integrative oncology. However, as you review her comments, you may wonder how get up-to-date and reliable information sources to provide advice and educate patients. Drs. Boddy and Ernst from the United Kingdom took on this challenge, and they review how to locate and use reliable information sources needed to provide appropriate integrative oncology care. They provide a comprehensive review of how to search for those resources and bring practical examples and suggestions for current available Web sites. Dr. Lu and his colleagues from the Dana Farber Cancer Institute review the use of acupuncture in cancer care. This therapy has been around for more than 3000 years and is a commonly used CIM practice. In cancer care, it has been used successfully to improve quality of life, sleep, appetite, pain, and nausea after chemotherapy. Dr. Lu further explores the issue of research and support for the use of acupuncture in cancer care.

Dr. Myers discusses the use of massage therapy in cancer care. Massage is another commonly used approach to improve quality of life in patients suffering from cancer. Massage can reduce anxiety and tension, a symptom experienced by most people who have cancer and other cancer-related symptoms.

The topic of researching integrative oncology practices is quite complex. Drs. Yeung, Gubili, and Cassileth from the Memorial Sloan-Kettering Cancer Center examine evidence-based research on herbal therapies and the complexities related to researching these agents, including selecting an appropriate study method and clinical trial design, navigating through regulatory obstacles, and obtaining funding. They emphasize how evidence-based botanical research can help validate traditional uses and facilitate new drug development.

Drs. Verhoef and Leis from Canada bring a unique outlook on the limitations of current research methodology used in cancer care. They emphasize that cancer care is a complex package of a wide range of interventions often complemented by self- and supportive-care. They review the challenges faced by biomedical research in cancer care and discuss new research directions to meet these challenges. They examine the value of qualitative research and whole systems research methods as possible research, which are especially relevant in the field of integrative oncology and conventional oncology when examining personalized medicine.

The mind-body connection is an extremely important topic being discussed in most integrative oncology practices, and Dr. Gordon provides a comprehensive review on this topic. He elaborates on the scientific evidence on stress and cancer and discusses the multiple options available for stress reduction. The mind-body connection is an important aspect of integrative oncology and is further emphasized in the recent Institute of Medicine report [21]. This comprehensive report states, "cancer care today often provides state-of-the-science biomedical treatment, but fails to address the psychological and social (psychosocial) problems associated with the illness. These problems – including... anxiety, depression or other emotional problems... – cause additional suffering, weaken adherence to prescribed treatments, and threaten patients' return to health" [21]. As Dr Gordon suggests, mind-body interventions appear to address many of the issues mentioned in the Institute of Medicine report.

Drs. Flory and Lang from Harvard University discuss the practicality of how mind-body interventions are successfully used in the diagnostic radiology domain and how effective those techniques are in reducing morbidity and cost to the health care system.

We present our experience in integrative oncology from The University of Texas M.D. Anderson Cancer Center. We describe how a program of integrative oncology can encompass the different aspects of integrative oncology and

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how they are integrated into a large comprehensive cancer center in a real life setting.

Drs. Ben-Arye, Schiff, and Golan from Israel provide a distinct dimension on integrative oncology and ethics. They review a case presentation and examine the multiple issues related to ethical dilemmas in using integrative medicine in cancer care, with practical important suggestions for future patient care.

Mr. Barasch provides a unique perspective on remarkable recoveries. He brings his perspective on exceptional patients who had an unusual and unexpected recovery from their illness. His views are based on his personal experience as a patient and as an author of a New York Times best seller book *Remarkable Recovery* [22].

In this issue of *Hematolgy/Oncology Clinics of North America*, we have tried to provide an overview of integrative oncology as a new evolving field in medicine. We approached integrative oncology in a bio-psychosocial-spiritual manner. We start with specific issues that relate to the "physical body" and evidence-based research and practice. This is followed by examination of the psyche and the social context in relationship to health and healing. We end with "the spirit", as noted in Dr. Remens' profound article, presenting stories that highlight the meaning of our practice. We see this issue as a stimulus and a base for further discussion and research, and we hope that it surprises you, at times touches your heart, and mostly inspires you.

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