

Complementary/alternative medicine: we need to become more knowledgeable

The editors of the Annals of Allergy, Asthma and Immunology recognize that there are many physicians who will not be receptive and some who will be receptive to the information provided in this issue's review article by Drs. Graham and Blaiss concerning complementary and alternative medicine (CAM). While each one of us may have our own opinions about CAM, it is apparent that many of our patients are very interested in this area as it relates to our specialty and are receptive to this growing area of health care, the editors feel that it is an important area of education.

—Editors

The past decade has seen an expansion in the public and professional recognition of CAM approaches to health care as a wanted component in health and wellness. This growing interest is due to the recognition that conventional medicine has limitations and that the United States' cultural diversity is a reflection that the majority of the health care throughout the world utilizes complementary and alternative approaches.

The World Health Organization estimates that eight of ten human beings on the planet resort primarily to herbal remedies for their health and that for most of the world's population, it is the allopathic medicine that represents the departure from traditional medicine. While we use the term "alternative" for the developing countries, the role of these modalities are primarily "complementary" in the United States, ie, patients use them to complement the treatments offered by their conventional health care providers. Extrapolating from 1,500 telephone interviews, Eisenberg calculated that patients made more visits in 1990 to

CAM practitioners (425 million visits) than to primary care providers (388 million visits).¹ Similarly Astin et al also found that more than 400 of 1,000 individuals randomly surveyed had relied on some form of alternative health care over the prior year of the survey.² Interestingly, these patients were willing to spend out-of-pocket for these services that rivaled the cost of hospitalizations for that same year and that the second most common reason for seeing these CAM providers were for "allergies." It is extremely important for our specialty to recognize what our patients may be using and to properly advise them about these modalities and the possible physiologic and immunologic adverse effects.

In a United Kingdom study focusing on CAM treatment modalities for asthma, these ranged from breathing techniques to herbal medicine.³ The review article by the authors provides an overview of a variety of CAM modalities as it relates to asthma. Although clinical studies providing support for the independent use of CAM in asthma are limited, there are several studies that have investigated these agents in animal models with some success. Whether this will lead to their clinical use in our practices is yet to be seen. They may, however, lead to the discovery of newer pharmacologic agents similar to the development of cromolyn from khellin, a derivative of the *Ammi visnaga*, a member of the carrot plant family (Umbelliferae) that is native to the Middle East. This herbal modality that is being used in the treatment of allergies was originally reported for the treatment of angina pectoris in 1951 in some of the more established journals as the *New England Journal of Medicine*.⁴

In addition, the interest and awareness of CAM among the orthodox health care professionals has also increased over the past 30 years.⁵ Although the cumulative number of clinical trial-type articles is small, the overall increase in the number and proportion of reports of "clinical trials" reflects an increasing level of original research activity in complementary medicine and suggests a trend toward a more ethical evidence-based approach in this discipline. There is a need for more high-quality original research in CAM especially as it relates to our specialty of allergy, asthma and immunology.

To attempt to develop more evidence-based information in CAM, the National Institutes of Health with the establishment of the Office of Alternative Medicine in 1992 has been playing an increasing controversial role. Senator Tom Harkin who chaired the appropriations committee that oversees the budget for the National Institutes of Health had rejected the standard allergy therapies for the treatment of his "half-a-box-of-tissues-a-day" allergies and instead found relief from "bee pollen tablets" and thus he became an enthusiast for unconventional therapies.⁶ It was under his tenure that the NIH Office of Alternative Medicine was established and charged by Congress with furthering the investigation of CAM treatments, by documenting the range of promising approaches, designing scientifically appropriate studies, and issuing grants evaluating the effectiveness of some of these modalities. In 1996, a consensus panel that was assembled by the NIH concluded that relaxation techniques, hypnosis, cognitive-behavioral techniques and biofeedback were sometimes effective in relieving

chronic pain syndromes.⁷ As an example, we have recently completed a NIH NHLBI sponsored Raynaud's Treatment Trial in which the orthodox standard of treatment, ie, medication (calcium channel blockers) was compared with a CAM modality (biofeedback). The study found that within a rigorous standardized format, medication was superior to biofeedback although there were a subset of patients who apparently benefited from the biofeedback intervention.⁸ Such studies will also need to be performed for a variety of other CAM modalities for various disorders and results published whether positive or negative. This will be forthcoming with joint ventures with the NIH Office of Alternative Medicine as reflected in the growth of their funding from \$1.7 million in 1992 to almost \$80 million in 2000. In our specialty, the NIH funded a center at the University of California, Davis that focuses on asthma and allergy and another at Bastyr University that focuses on HIV and AIDS.⁹ Under the newly appointed Director, Dr. Stephen Strauss, who originally came from the NIH—National Institute of Allergy and Infectious Diseases, the scientific oversight evaluating these functions appears to be in good hands.

While it may seem odd at first, but clinical integration offers one of the keys to physicians' better understanding of CAM modalities. It is a primary concern of physicians that some patients may defer seeking appropriate medical attention for their clinical problems if they "only" seek alternative practices. In order to prevent the inappropriate use of CAM modalities for such serious atopic disorders such as anaphylaxis with echinacea and asthma with stramonium cigarettes, or autoimmune problems such as rheumatoid arthritis with bee stings, we need to question our patients about their "alternative" practices and incorporate them to "complement" our treatment programs. This review and others¹⁰ provide the initial background for our specialty to better understand these issues.

In the field of Allergy, Asthma and Immunology, the popularity of CAM is more widespread than other common chronic medical problems. Overall CAM use has created a \$15-billion-a-year industry in dietary supplements alone. This has been especially fueled by the deregulation on the "herbal" industry by the congressional passage of the Dietary Supplement Health and Education Act of 1994¹¹ that limited the role of the Food and Drug Administration (FDA). Health care delivery systems are now questioning as to how to structure the integration of the clinically justified, ie, successful human clinical studies of CAM therapies into the daily care of our patients with the intent of decreasing costs on the pharmaceutical utilization while increasing patient satisfaction and client retention. Two leading models under consideration by insurers are (1) the delivery of CAM services through credentialed networks of CAM providers or (2) the creation of clinical services in which conventional medicine CAM modalities are integrated.¹² In fact some managed care organizations premium such as the Oxford Health Plan are already starting to offer such CAM options.^{13,14} This involves a 2% to 3% price supplement added to the premium with outcomes being performed in conjunction with Dr. Eisenberg at Harvard University.

It would appear that our specialty would clearly benefit from knowing more about these entities since "allergies" are high on the list of patients seeking CAM. This will ensure that we are better prepared to coordinate the future possibilities and to "doctor" (ie, teach) our patients about the risks and benefits of these modalities.

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REFERENCES

- Eisenberg DM, et al. Unconventional medicine in the United States. *N Engl J Med* 1993;328:246–252.
- Astin JA. Why patients use alternative medicine: results of a national study. *JAMA* 1998;279:1548–1553.
- Ernst E. Complementary therapies for asthma; What patients use. *J Asthma* 1998;35:667–671.
- Osher HL, et al. Khellin in the treatment of angina pectoris. *N Engl J Med* 1951;244:315–321.
- Barnes J, Abbott NC, Harkness EF, Ernst E. Articles on complementary medicine in the mainstream medical literature. *Arch Intern Med* 1999;159:1721–1725.
- Weber DO. Considering the alternatives. *The physician executive*. 1998; 6–14.
- NIH Consensus Statement, 1997 November, 3–5; 15. Available on line at http://odp.cd.nih.gov/consensus/statements/cdc/107/107_stmt.html
- The Raynaud's Treatment Study Investigators (Bielory L—RTS Chairman). Comparison of sustained-release nifedipine and temperature biofeedback for primary Raynaud's phenomenon: results from a randomized clinical trial with 1-year follow-up. *Arch Intern Med* 2000;160:1101–1108.
- <http://altmed.od.nih.gov/oam/clearinghouse>.
- Bielory L, Lupoli K. Herbal interventions in asthma and allergy. *J Asthma* 1999;36:1–65.
- 103rd Congress. Dietary Supplement Health and Education Act of 1994. Pub. Law 103–417. 108 Stat. 4325, 1994.
- Pelletier K, Marie A, Krasner MA, Haskell WL. Current trends in the integration and reimbursement of complementary and alternative medicine by managed care. *Am J Health Promotion* 1997;12:112–123.
- Complementary and alternative medicine: issues impacting coverage decisions. Executive summary and presented papers available through the Office of Alternative Medicine Clearinghouse, Silver Spring, MD, October 1996.
- Weeks J. Managed care meets alternative medicine: reflections on overcoming the polarization. *Alternative Complementary Therap*. 1997;37–41.