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## Editorial

## Dentistry and CAM

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Complementary and alternative medicine (CAM), as defined by Barnes et al. [1] is "a group of diverse medical and health care systems, therapies, and products that are not presently considered to be conventional medicine." To date, the scientific peer reviewed databases of CAM and its interfaces with dentistry are minimal as compared to our medical colleagues. This is despite the fact that the usage of CAM in the U.S. has grown at an increasing rate within the past 20 years. Estimates of the general population's usage of some type of CAM modality within the past year have been approximated at 30% to 60% [1-5].

The high rate of CAM therapy usage is not limited to the U.S.; it also appears to be prevalent in most industrialized societies throughout the world [6-11]. Consumers have both initiated and perpetuated this trend. It also appears that the preponderance of patients using CAM are doing so in conjunction with allopathic (conventional) medicine, thus, they are not abandoning allopathic medicine, only complementing it with other CAM therapies [3,4,12]. There is no doubt that dentists are and will continue to see patients that are using Complementary and Alternative Medicine Therapies. Understanding these therapies and the implications of these therapies on the patient's oral and systemic health are a critical component in providing optimal dental care.

Diverse patient populations have been specifically studied with respect to usage of CAM therapies. There are many well-designed studies [13-20] that explore epidemiology and CAM usage in various medical settings, with patients who have a range of medical conditions. In 2002, data presented by Strader et al. [14] showed that the use of CAM in patients with liver disease was relatively common (39%), and that many patients were using herbs to treat their liver disease. Many of these same patients were not disclosing their use of herbs to their treating physician. Therefore, physicians treating patients with liver disease need to be prepared to discuss with their patients any potential herb/drug interactions, or herbal toxicities with respect to the hepatic metabolism of these herbal supplements. Smith et al. [17] studied patients with inflammatory eye conditions and discovered that 42% of subjects used a CAM therapy to treat their inflammatory eye disease and that they were more likely to use vitamin supplements rather than herbs. Smith et al. [17] also found that a certain subset of patients with inflammatory eye disease (those diagnosed with uveitis) was more likely to use CAM therapies than subjects with other inflammatory eye diseases. Thus, ophthalmologists treating patients with inflammatory eye diseases should be aware of these CAM usages in their patients. Not only can the physicians better predict who may be using CAM therapies, but they also can study the specific therapies used and give valuable advice with respect to efficacy, safety, and possible drug interactions of these CAM therapies. Basic epidemiologic data with respect to dental patients and CAM usage is currently insufficient and filling this void would allow the practicing dentist to better treat his/her patient.

It may be a logical next step for dental researchers/clinicians to evaluate clinical hypotheses and use the same rigorous scientific methodology that has been conducted by our allopathic colleagues and disseminate that information in peer reviewed medical/dental journals. This is not to say that the dental/medical literature is devoid of this information. One can search databases and find many well designed and well executed studies that fulfill the above criteria. Suyama et al. crossover, double blind investigation of the remineralization and acid resistance of enamel lesions after chewing gum containing fluoride extracted from green tea, is an excellent example of a recent well designed CAM/Dental study [21]. Duss's study published in the Journal of Clinical Periodontology is a great example of a rigorous CAM/ Dental investigation that followed the scientific method and resulted in elucidating clinically significant results in a well-respected peer reviewed journal [22]. The increasing well designed and documented evidence is promising, but we must continue to add to the quality and quantity of scientific evidence relating CAM to Dentistry. As additional data from randomized, double blinded, controlled trials accumulate, systemic reviews may be performed to help the clinician in critically appraising and synthesizing data from numerous studies and draw valid clinical conclusions.

I have heard from CAM researchers and clinicians alike that "The scientific method is far from perfect, and CAM therapies are hard to evaluate with this methodology". While the previous statement may be true, I feel that the established scientific method is the best methodology we currently have. It is only when we as a CAM community are willing and able to have our techniques and procedures evaluated by the scientific method that we will be taken seriously and hopefully this will allow our valid techniques wide dissemination to a public that needs them.

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