

CAM and the Internet: How to Protect Your Clients and Patients

The amount of medical misinformation on the Internet, especially for complementary and alternative medicine (CAM), is staggering. The seemingly endless variety of treatments for practically every condition confuses for patients and healthcare professionals alike. Veterinarians may find themselves needing to defend their conventional treatment recommendations to clients carrying fistfuls of files on CAM downloaded from the Internet. Websites selling CAM products for animals proudly display pages of testimonials from satisfied clients. They may also offer reassuring seals of approval and statements of support from veterinarians. Furthermore, a recent survey showed that over half of people using the Internet for health information said they thought “almost all” or “most” of the material was credible (cited in *JAMA* 2003;290:1505-1509). Only 25% of respondents routinely scrutinize the information, references, and sources presented by a health-related website.

A major impediment for veterinarians wanting to offer balanced guidance on CAM approaches is the paucity of evidence-based studies on CAM treatments for animals. The lack of evidence notwithstanding, consumers can and do purchase herbs and supplements directly from suppliers over the Internet who have a financial incentive to sell their product. Internet-based CAM practitioners, who diagnose and treat animals without a valid doctor-client-patient relationship or even a license to practice veterinary medicine, amplify the magnitude of problem.

Many practitioners may be unaware that the United States Food and Drug Administration (FDA) has stipulated different regulations for dietary supplements (which include herbs), depending on whether they are sold for human or animal usage (<http://www.fda.gov/cvm/default.html>). While the 1994 Dietary Supplement Health and Education Act (DSHEA) allows manufacturers of human supplements to sell products without substantiating data or pre-approval from the FDA, the DSHEA was neither intended for, nor does it apply to, supplements sold to treat animals – a decision upheld in at least one court case. Per the FDA Center for Veterinary Medicine (FDA CVM): “[S]ubstances marketed as dietary supplements for animals still fall under the pre-DSHEA regulatory scheme...Most of these types of products on the market would be considered unapproved and unsafe food additives or new animal drugs based on current intended uses.” “These products are not removed from the market because most of FDA’s limited resources must be focused on products or incidences that pose a known hazard to human or animal health. Thus, the FDA does not always have the time or resources to take enforcement action against products that are more fraudulent than dangerous.” And, “While these products are technically in violation of the law, they are of low enforcement priority except for when public or animal health concerns arise.” [http://www.fda.gov/cvm/index/fdavet/2002/May_June.htm].”

The FDA and the Association of American Feed Control Officials (AAFCO) are working to establish procedures to evaluate “novel ingredients” (botanicals and herbs) for animals; there are about 180 botanical species that are currently marketed or in use by animal health professionals in the US. The National Animal Supplement Council, an industry group “dedicated to protecting and enhancing the health of companion animals and horses throughout the United States” has forwarded “best manufacturing practices” to AAFCO designed to promote quality assurance, product safety, and a commitment to ongoing research and development [<http://www.nasc.cc/>]. Ideally, the combined efforts of regulatory, advisory, and industry groups will result in fewer concerns about product safety and better guidelines for product manufacture and utilization which will provide consumers increased confidence that the supplements they are giving their animals are harmless and effective. In the meantime, the FDA CVM website provides avenues for reporting products that may be “fraudulent or otherwise misbranded or adulterated” [<http://www.fda.gov/cvm/index/fdavet/1996/july96.htm>].

Until more is known about the effects of supplements on non-human species, veterinarians will need to consult scientific information from the human literature to help clients discern fact from fiction, to the best of their ability. It is not sufficient to simply allow clients to “go it alone” or to rely on information from lay publications, even when offered by “holistic veterinary experts”. As an example, the “Pet Corner” column in the January/February issue of *Herbs for Health* magazine suggests that consumers apply pennyroyal oil to their animals for fleas. Pennyroyal is highly toxic herb; even small amounts have caused death in humans and animals. Another startling example involves recommendations made in *The Veterinarians’ Guide to Natural Remedies for Cats – Safe and Effective Alternative Treatments and Healing Techniques from the Nation’s Top Holistic Veterinarians* and its counterpart for canines. These books recommend the internal use of comfrey for bone healing, claiming it can make a “dramatic difference”. Comfrey is carcinogenic and contains at least eight pyrrolizidine alkaloids – hepatotoxins that can cause irreversible liver damage. Some “holistic experts” advise that small doses of comfrey are nontoxic, but the effects of the alkaloids are cumulative; signs of toxicity may not present until the animal undergoes physiologic stress. The health and safety concerns about comfrey have prompted regulatory action by the United States, Canada, and Germany [<http://www.aafco.org/comfrey.html>] and AAFCO has recommended a nationwide enforcement event for comfrey. This is merely one example of why information from uncritical, unscientific sources cannot replace the advice of a discerning veterinarian who has critically evaluated the peer-reviewed scientific literature.

Pointing clients toward biomedical databases containing factual information on complementary and alternative medicine is the most important step in empowering clients to look beyond the testimonials and claims of cures made by CAM websites. The few seconds consumers would spend searching the

National Library of Medicine (NLM) PubMed site [<http://www.ncbi.nih.gov/entrez/query.fcgi>] for abstracts on, for example, the aforementioned toxic herbs pennyroyal and comfrey could save them from having to treat their animals and family members for herb-induced toxicosis. MEDLINEplus, from the NLM and National Institutes of Health, provides consumer-directed information, including evidence related to CAM at <http://medlineplus.gov/> . Additionally, the NLM provides a large number of databases and electronic information sources at <http://www.nlm.nih.gov/databases/databases.html> .

Providing website evaluation guidelines will help clients consider the veracity of CAM claims. Gunther Eysenbach, MD, MPH, a leading researcher in cybermedicine and eHealth, advocates the “CREDIBLE” criteria [*Am J Med.* 2002;113:763-765]: **C**urrent and frequently updates, **R**eferences cited, **E**xplicit purpose and intentions of the site, **D**isclosure of sponsors, **I**nterests declared and not influencing objectivity (e.g. financial interests), **B**alanced content listing advantages and disadvantages, **L**abeled with metadata, and **E**vidence-level indicated. However, be prepared for client frustration, as there are practically no websites available on CAM treatments for animals that meet the CREDIBLE criteria, despite a growing need.