Complimentary Medicine:
Do We Have the Evidence to Support its Use?

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In 2007 it was determined by survey that 38% of the human adult population used Complimentary and Alternative Medicine (CAM). No data in pets. What is CAM? Hard to define as it is a broad field that is constantly changing. The National Institute of Health defines it as "A group of diverse medical and health care systems practices and products that are not considered part of conventional medicine." It is considered complimentary when it is used side-by-side with conventional medicine. It is considered alternative medicine when it is used in place of conventional medicine.

Cam by category

Nutritional supplements include dietary supplements such as herbal medicines and botanicals, vitamins and minerals, microorganisms and probiotics. 17.7% of human adults use these products, most commonly omega 3's. Spinal practices include chiropractic, physical therapy, and manual therapies such as massage and soft tissue manipulation. Energy based practices fall into two categories, measurable and not measurable. Measurable such as magnet and light therapies are covered in other lecture. Putative, or yet to be measured includes Qi Gong, Healing touch including Reike. There are also whole medical systems such as homeopathy, naturopathy and TCM.

The scientific method

All studies that I looked at for this lecture had to be held to the same standards. Modalities insisting that they needed something other than the scientific method were ignored when the studies did not conform. I did not look at studies conducted by someone with an obvious vested interest in the outcome, such as the manufacturer of a product. Methodology such as trials being blinded, having a placebo and evaluation of the relative magnitude of the measured effect were given precedence. Secondary consideration was given to sample size. In veterinary studies, because of cost, sample sizes of 20 would be considered good, where it would be inadequate in a human study.

Results

Herbal and botanical

There was much research and anecdotal evidence of their effectiveness in respiratory ailments, pain, ulcers, skin lesions, as parasiticides and others. I reviewed 229 papers for this lecture, and almost half had good studies. Lacking overall was a discussion of side effects and interaction with other herbals and pharmaceuticals. There is also only a voluntary reporting system in place for adverse reactions. Finally, testing for quality and content is almost non-existent, although the methodology exists. I feel that there is a great future potential but until the industry is regulated, they are too risky to use.

Microorganisms

Although there is a plethora of papers in human medicine, over 3000 on a PubMed search, only 7 involved dogs. Of those 7, 5 were about GI health. Of those papers, although there were some that would be considered having positive results, most of the research was poor. There was one paper from JAVMA that was overall positive. Although there was a dearth of veterinary papers, extrapolating from the human side, it looks like there is good evidence for the treatment of certain GI diseases and limited but optimistic evidence for the treatment of certain immune disorders.

Chiropractic

There were very few quality veterinary studies, many anecdotal stories of success. Of the few studies that were out there, most of them were positive, but involved horses. The conclusion from studies only is that there is no evidence to support it's use in veterinary medicine. However, I also walked away with the feeling that if good studies were done, the evidence might be there.

Physical therapy

The problem with trying to prove such a broad field like rehab is like trying to prove "veterinary medicine" works. Each modality needs to be looked at individually: Exercise, manual therapy, mobilizations, assistive devices, traction, stretching massage, therapeutic ultrasound, TENS, etc. When I looked at anything in the above categories, with the exception of therapeutic ultrasound, I could find good studies supporting their use.

Massage

There were several papers discussing massage and it's effects in the reduction of pain and stress. One paper in particular showed a reduction in opioids in cancer patients receiving massage. Overall it was positive as long as it wasn't making claims about curing something.

Healing touch including Reiki

This is a system of touching with the hands based on a belief that such touching by an experienced practitioner produces beneficial effects by strengthening and normalizing certain vital energy fields held to exist within the body. Not a single veterinary study was found that met at least 2/3 of the criteria I set forth. There was a Cochrane review of randomized controlled trials with the compared effect of touch with placebo, combined with another treatment or no treatment at all. They looked at randomized blinded studies with placebo. The conclusion was that no robust evidence that therapeutic touch promotes healing of wounds. There was one study on Reiki that I found that was double blinded, and placebo was used on women that underwent an elective C-section. Reiki had no effect on pain.

Homeopathy

There are a huge number of studies out there. I could not read them all but I could not find one study that was well designed. There was a commonality to some of them in that the researchers were insistent that homeopathy studies should not have the same rules of scientific method applied to them, that it somehow deserved more lenient standards. No evidence it works.

Naturopathy

A whole body system based on a belief in vitalism, which posits that a special energy called vital energy guides body processes. This energy has never been measured. No veterinary studies were found however human studies show intervention in naturopathy can reduce blood pressure and relieve pain. Conclusion is that it is very controversial in human medicine. No use in veterinary medicine since it involves the thought process of contemplation of the medical condition and a conscious effort to self-heal.

Prolotherapy

This involves injecting an otherwise none-pharmacological and non-active irritant solution into the body, generally in the region of tendons or ligaments for the purpose of strengthening weakened connective tissue and alleviating musculoskeletal pain. Also referred to as proliferative therapy or PrT. The best study I saw used a corticosteroid as the injection. Many other studies were neutral in their findings with no benefit over placebo. Many poorly designed studies which were basically clinical reports in Prolo journals. The most interesting study I found was designed to look at the different concentrations of the irritant and they found varying degrees of inflammation and reaction depending on its strength. This seemed to hold the promise that if enough research is done, there may be a benefit. At the present time, there is no proven benefit.