PVMA Article #2

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Herbal Therapy and Homeopathy

Herbs have been found in gravesites dating back to the Paleolithic era. With the advent of agriculture herbs were grown purposefully for medicinal use. Texts demonstrating therapeutic knowledge of herbs date back as far as 2,000 B.C. A large and growing body of research, from both laboratory and clinical settings, supports the efficacy of herbal therapy and continues to clarify areas where caution needs to be exercised. Two of the most popular herbal traditions in use today are Western and Chinese herbal medicine.

The Western (European) herbal tradition was suppressed during the Dark Ages and revived again during the Renaissance; it employs various plants as single herbal preparations or as combinations of a few species. Plants are chosen based on their properties and organ affinities; for example, slippery elm is a demulcent (a mucilaginous agent that forms a protective layer over inflamed tissues) with special affinity for the respiratory, digestive, and urinary tracts. One plant may have several different actions (slippery elm is also an astringent and digestant), and appear in various formulas with other herbs that complement its action (slippery elm may be combined with echinacea, an antimicrobial herb, and turmeric, another antimicrobial which stimulates digestion and reduces gas). Western herbs may be gentle (hawthorn) or very strong (digitalis), with cautions and contraindications ranging accordingly.

The Chinese herbal tradition has been continuous throughout its known history; it employs not only plants, but also mineral (e.g. seashell) and animal (e.g. insect) substances. Chinese ingredients are also chosen based on their properties and organ affinities, but these are conceptually different than in Western herbalism; the patient's entire "pattern of disharmony" must be understood in light of traditional concepts like qi, yin, yang, and natural metaphors like damp, cold, wind, and heat. Formulas are arranged using a hierarchy of ingredients: the *chief* (or emperor) has the greatest effect on the principal pattern involved, the *deputy* (or minister) aids the chief ingredient and also addresses coexisting or secondary patterns, the *assistant* helps to moderate the effects of the chief and deputy ingredients (even reducing potential toxicity), and the *envoy* focuses the formula on a certain meridian or body area and harmonizes the formula as a whole. Not all types of ingredient are used; many formulas consist of only a chief and one or two deputies, but the option to add assistants and envoys makes Chinese formulas extremely adaptable.

Many veterinary clients give herbs to their pets as part of daily meal preparation (often chosen without assistance), so they may not think to mention it when asked during an exam what medications their pet is receiving. It's important to know this information, however, as it may affect your patient's condition and response to conventional therapy. On the whole, herbs are very forgiving compared to conventional drugs, and because they contain many synergistic phytochemicals rather than a large dose of one chemical they tend to help on many levels of a disease process. Most herbs do not produce side effects when taken within their therapeutic window by patients whose condition and therapeutic regimen are complemented by their use. The majority of potential reactions occur when an herb stimulates a process that's already in an excited state (e.g. patients with allergies to ragweed will be more likely to react to chamomile), or when an herb augments the actions of a drug (e.g. combined effects of garlic and anticoagulants). The following is a sampling of herbs that should be used with caution in large doses:

• Chamomile (patients with environmental allergies, patients at risk for bleeding)

• Echinacea (patients with autoimmune disease, patients on medications that stress the liver)

• Feverfew (patients with environmental allergies, g.i. ulceration, breeding bitches)

• Garlic (patients at risk for bleeding, pemphigus, organ transplants)

• Ginkgo (patients at risk for bleeding, patients on phenobarbitol, breeding bitches)

• Ginseng (patients with high blood pressure, patients at risk for bleeding, breeding bitches)

• Milk Thistle (may increase liver enzymes in patients who don't have ongoing stress to the liver)

• St. John's Wort (sun sensitivity, patients on serotonin reuptake inhibitors)

Herbs for use in animals are typically dispensed as powders, pills or liquids (water/alcohol or glycerin extracts). As water/alcohol extracts are very concentrated, only small doses are required; glycerin extracts (glycerites) are less concentrated but more palatable. Care needs to be taken to purchase formulas from a reputable manufacturer; some products don't contain their label concentrations and others contain toxic impurities. All that being said, hundreds of herbs have been shown to provide great medicinal benefit with a wide margin of safety, due in large part to the synergistic and supportive nature of the many biologically harmonious compounds they contain. One last caution regarding herbs pertains to essential oils. An essential oil is a concentrated hydrophobic liquid prepared by the distillation of volatile aromatic compounds from certain plants. Many of these compounds can be toxic to dogs and cats when essential oils are applied topically or used as aromatherapy. Topical application is made safer by the addition of a carrier vegetable oil, such as olive oil, but even then caution is indicated in dogs and extreme caution in cats. Essential oils known to have caused severe illness and several deaths include Pennyroyal, Wintergreen, Melaleuca (tea tree), and Citrus oils. Also, seizures in humans have been reported with the use of Eucalyptus, Fennel, Hyssop, Pennyroyal, Rosemary, Sage, Tansy, and Wormwood oils among others. Hydrosols are made from the water fraction left behind during distillation of essential oils, and are used by some practitioners as a safer alternative to the oil; however their use in veterinary medicine has not been critically evaluated.

Homeopathy is often confused with herbal medicine (and is actually derived from it), but is guite different in form and function. It began with the experiments of a German physician, Samuel Hahnemann (1755-1843), who noticed that Cinchona (Peruvian Bark) which was used to treat malaria at the time, caused symptoms similar to malaria if taken in excess by a healthy person. Tests with other substances showed the same tendency. leading to the idea that a substance taken in small doses by an ill person tends to alleviate symptoms similar to what it can cause if taken in large doses by a healthy person; hence the phrase "like cures like" and the term *simillimum* to describe the matching substance. Substance selection is quite individual in the clinic setting; three patients with the same diagnosis might receive three different substances since each has a unique manifestation of the disease process. Further experiments with different dosages led to the *potentized remedy* - a serially diluted liquid form that is vigorously shaken between each dilution step. (For example, Pulsatilla 30C begins with a mother tincture of Pulsatilla herb which is then diluted 1:100 in water/alcohol thirty times, with shaking after each dilution. 12X would mean it has been diluted 1:10 twelve times.) Creating cavitation in the liquid was thought to bring out the energetic qualities of the substance, as serial dilution without shaking did not produce effective remedies.

Some of these preparations are so dilute as to theoretically no longer contain any of the original molecules (having a total dilution factor greater than Avogadro's number); again, it is the energetic, or bioelectromagnetic, qualities of the preparation that are thought to be acting on the bioenergy of the patient. For this reason, properly selected homeopathic remedies - even those prepared from poisonous plants and toxic minerals - do not present a hazard. The potentized remedy is not readily analyzed in a laboratory setting, but clinical trials that allow proper remedy selection (i.e. the remedy is chosen

for that particular individual rather than the same remedy for every subject) have shown positive results. And the fact that it is possible to make a patient worse with a poorly selected remedy would tend to indicate there is indeed something at work; changing to the right remedy tends to bring about notable improvement. So if someone says their dog is on Belladonna for fireworks phobia, make sure it's the homeopathic and not the herb!