

Finding the Evidence for TCM

The holistic approach of traditional Chinese medicine (TCM) incorporates techniques such as herbal medicine and acupuncture. In contrast to the disease-targeted approach adopted by Western evidence-based medicine (EBM), TCM treats the individual based on “syndrome differentiation.”

There has been much basic research on TCM, but the quality of evidence and lack of strong research through good methodology and detailed reporting are problematic. There are many challenges to scientifically researching TCM: difficulty isolating active herb components and batch variation; difficulty recreating treatment strategies between studies because TCM protocols are often individualized; and difficulty creating placebo controls, especially in multiple-herb formulations and acupuncture. Outcome measures are challenging, as standardized measures of success are uncommon. Various approaches can help overcome these challenges, and there is some Level 1 evidence supporting TCM intervention in human conditions, including irritable bowel syndrome, strokes, and migraines. Newer technologies and research tools should allow for more rigorous

efficacy and safety studies, but EBM standards should be flexibly applied to TCM studies, considering the unique characteristics of TCM practice.

Commentary

The growing prevalence of TCM in human and veterinary medicine over the past 20 years has shown true health benefits in many clinical settings. The most scientifically supported area is acupuncture for pain conditions, and many studies support acupuncture techniques for other conditions (eg, hypertension, seizures, diarrhea). There is a general charge to integrated and holistic practitioners to contribute to the scientific community with clinical trials. Determining species-specific responses to TCM therapies, identifying patient populations, and examining potential toxicities or contraindications are of critical importance.—*Heather Troyer, DVM, DABVP, CVA*

Source

Fung FY, Linn YC. Developing Traditional Chinese Medicine in the Era of Evidence-Based Medicine: Current Evidences and Challenges. *eCam*. 2015;2015:1-9.

A Novel Bone Marrow-Sampling Technique

Secondary dysmyelopoiesis—nonregenerative anemia with or without thrombocytopenia or leukopenia and an associated disease or drug treatment—has been reported in dogs after accidental toxic phenobarbital (PB) ingestion. This report describes PB-induced secondary dysmyelopoiesis in a critically ill dog diagnosed via a novel bone marrow-sampling technique. A 1.5-year-old Lhasa apso receiving PB (2.1 mg/kg PO q12h) for 6 months presented depressed, recumbent, and febrile following a week of lethargy and worsening tonic-clonic seizures. Leukopenia, thrombocytopenia, and anemia were attributed to underlying sepsis and aspiration pneumonia; however, myelodysplastic disease was suspected with continued decline of all indices despite aggressive treatment. PB was immediately discontinued and levetiracetam treatment initiated. Severe, persistent leukopenia necessitated bone-marrow sampling. The dog was placed in lateral recumbency, and using local analgesia, a 22-gauge needle attached to a 3-mL syringe was inserted at the costochondral junction of the 10th rib and advanced dorsally into the medullary cavity to aspirate bone marrow. Cytology revealed erythroid hypoplasia, megakaryocytic hypoplasia, and myeloid hyperplasia with a predominance of myeloblasts, consistent with secondary dysmyelopoiesis. Treatment was successful; by day 18, blood indices were either continuing

to resolve or completely resolved and another costochondral rib aspirate revealed myeloid and erythroid precursors maturing in a normal manner. Authors concluded that costochondral bone marrow aspiration was an efficient, advantageous tool for identifying secondary dysmyelopoiesis without sedation in this critically ill patient. Prognosis for this condition appears to be good with prompt identification and discontinuation of PB.

Commentary

Epilepsy is common in dogs, and treatment with PB is a common first-line anticonvulsant agent. This report is a reminder PB may be associated with a reversible pancytopenia; this is crucial because non-reversible causes of pancytopenia are almost universally associated with a grave prognosis. Also, remember the tenet *do no harm*; that is, avoid sedation or anesthesia that could compromise the patient's clinical course. This novel technique for a bone marrow aspirate may be useful in a variety of cases.—*Elizabeth Rozanski, DVM, DACVIM, DACVECC*

Source

Mathis JC, Yoo SH, Sullivan LA. Diagnosis of secondary dysmyelopoiesis via costochondral rib aspirate in a dog. *JVECC*. 2014;24(6):734-744.