

## **Integrative Veterinary Medicine at UC Davis**

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#### **Definitions:**

#### **Conventional medicine**

- Medical system in which symptoms & diseases are treated using drugs, radiation, or surgery.
- Synonyms: Allopathy, Western medicine

# Complementary alternative veterinary medicine (CAVM)

- Medical practices that are not part of conventional medical care.
- Synonyms: Holistic medicine, Natural medicine, Eastern medicine

#### **Integrative Medicine**

 Non-conventional approach is used together with conventional medicine.

#### **Holistic Medicine**

 Medical approach treating the whole body rather than, for example, one organ or symptom.

#### **Alternative Medicine**

- Non- conventional approach is used in place of conventional medicine.
- Not recommended

### **Integrative Veterinary Medicine**

- Veterinary medical care that combines conventional medicine with researched, scientifically-based complementary medical approaches to maximize patient care, including:
  - Acupuncture
  - Chiropractic
  - Photobiomodulation (therapeutic laser)
  - Extracorporeal Shockwave Therapy
  - Pulsed Electromagnetic Field Therapy
  - Massage Therapy
  - Myofascial Release
  - Few Dietary Supplements and Herbals

- Integrative Medicine lecture(s) and discussion(s):
  - Illustrate basic principles and clinical applications of integrative medicine including indications, types of therapies, scientific evidence, benefits, risks, and legal & ethical issues.
  - Strong focus on sports medicine and rehabilitation both in small and large animal (equine) patients
- Integrative Medicine clinical rotations for senior veterinary students
  - Small animal integrative medicine (Koh)
  - Equine integrative sports medicine and rehabilitation (le Jeune)

#### **Topic Rounds & Lectures**

- Multimodal Pain Management
- Acupuncture & Traditional Chinese Veterinary Medicine
- Photobiomodulation (Laser) Therapy
- Rehabilitation: Manual Therapy, Therapeutic Modality, Exercises
- Dietary Supplements & Herbal Medicine
- Regenerative Medicine
- Myofascial Pain
- Palliative & Hospice Medicine

#### **Learning Outcomes:**

- Recognize similarities & differences, strengths & weaknesses between integrative medicine and conventional medicine
- Understand how aspects of the two systems of medicine can be used to improve patient care, and identify the appropriate timeframe and clinical scenario for referral
- Identify chronic, neuropathic, and myofascial pain, and their management with pharmacologic and non-pharmacologic options
- Formulate problem list, treatment goals, and diagnostic plan based on clinical findings and history
- Formulate & implement an appropriate integrative medicine and rehabilitation therapy plan based on the clinical diagnosis and treatment goals
- Explain basic mechanisms & mode(s) of actions, clinical applications, and adverse effects of common forms of integrative medicine therapies: acupuncture, chiropractic, laser therapy, electrotherapy, shockwave, electromagnetic field therapy, therapeutic ultrasound, hydrotherapy, orthobiologic therapy, supplements, herbals.

12 year-old Warmblood dressage horse with chronic back pain and hind limb stiffness:

- Clinical evaluation includes full orthopedic & lameness & neurological & functional examination, saddle fit evaluation, ridden exam
- Diagnostics may include diagnostic analgesia, radiography, ultrasound, advanced imaging
- Treatments may include chiropractic, acupuncture, shockwave, therapeutic laser, local injections, saddle adjustment, change in diet, change in shoeing, specific targeted exercises and stretches

10 year-old Australian shepherd mix breed dog with severe hip dysplasia & osteoarthritis, and chronic hepatitis

- Clinical evaluation includes pain/lameness & orthopedic &neurological & functional exams
- Diagnostics include radiography of hips
  - Chronic hepatitis managed by internal medicine specialist
- Treatments for pain relief & improving mobility include acupuncture, manual therapy, Transcutaneous Electrical Nerve Stimulation (TENS), shockwave, therapeutic laser, joint injections, weight management, supplements/herbals, therapeutic exercises





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