In this Newsletter

Welcome to Small Animal Sports Medicine and Rehabilitation Service’s third newsletter! In our previous newsletters we reviewed how to recognize pain in your pet. In this newsletter we will discuss pain further, update you on our newest research publications and additions to our team.

Please note: This will be the last time you receive our newsletter unless you confirm that you would like to receive this information by signing up at www.DogJoints.com

Research update

Since our last newsletter two of our research studies have been published in the peer-reviewed veterinary literature: One study evaluated the use of a new surgical technique to stop inappropriate limb development in puppies (Hemiepiphysiodesis for the correction of proximal tibial valgus in growing dogs). Briefly, this study showed that by temporarily halting growth in one of the growth plates of the shin bone, we can straighten a puppy’s leg. The other study compared the success rate of stifle braces and surgery for the treatment of knee instability in dogs (Comparison of owner satisfaction between stifle joint orthoses and tibial plateau leveling osteotomy for the management of cranial cruciate ligament disease in dogs). This study showed that the client satisfaction rate is very high when choosing a brace for the treatment of knee instability, however, surgical treatment resulted in lower degrees of lameness as assessed by the owners.

If you would like to find out more about our research efforts please visit our website at www.dogjoints.com.

We are continuing to seek canine patients for enrollment in our two ongoing clinical trials (see info box to the right).

Team update

Thanks to generous private donations we were able to expand our team to include two interns and one resident this year. We are extremely excited to welcome Sarah, Theresa and Ilan at CSU. Theresa will be responsible for all patients receiving an orthotic or prosthetic at CSU, Sarah will be in charge of our clinical trials for the next year and Ilan has started his 3-year residency.

To see full bios of our team please visit our staff website at www.CanineSportsMed.Colostate.edu.

study participants (located in the Fort Collins area) needed:
- Medium to large breed dogs with lameness due to osteoarthritis for enrollment in our acupuncture study.
- Medium to large breed dogs with a lower forelimb problem requiring amputation for our prosthesis study.

More info: www.dogjoints.com

NEW: We now have a Facebook-site! Follow us at https://www.facebook.com/CSUCanineRehab/
Pain Management in Dogs and Cats

Written by Theresa Wendland and Felix Duerr

Why is managing pain important?

Anyone who has had surgery, experienced a significant injury, or has a chronic ailment like arthritis knows that pain can negatively impact quality of life. Uncontrolled pain causes suffering and can inflict physical and psychological harm. The body’s response to pain can suppress the immune system, delay healing, increase the rate of growth and spread of some cancers, and have many other negative impacts on health. It can also change behavior causing aggression, withdrawal, infliction of self-harm, etc. It is therefore imperative that we do our very best to prevent or successfully manage pain in our beloved companions.

Types of pain

Pain is both an emotional and physiologic sensory experience perceived by all mammals, human and non-humans. Some pain serves a purpose (i.e. is appropriate) and is part of normal adaptation while other kinds of pain are simply inappropriate (or pathologic).

Examples of “appropriate” pain include responses to a harmful stimulus like a hot stove or sharp object. This kind of pain is usually acute and helps to protect the animal from future pain by telling them to avoid it. Another example of appropriate pain is experienced due to recent tissue injury such as a cut, bone fracture, surgery, etc. This pain is experienced immediately when an injury occurs and it should stop once the injury is healed (generally by 3 months).

Pathologic (or “inappropriate”) pain on the other hand is a form of pain that does not serve a purpose and is not beneficial to the animal. This pain is a form of long-term (chronic) pain that can persist life-long. Examples are if pain continues after healing has occurred or an extreme sensitivity to something that should not normally cause pain such as light touch. This type of pain is due to exaggerated signals in the nervous system. It is important to know that pain which starts as “appropriate” can become “inappropriate” or pathologic if it is not treated thoroughly and immediately when an injury has occurred or surgery is performed. Both types of pain can and should be treated, but they may need to be addressed differently, and inappropriate pain can be much more difficult to alleviate.

Why does rehabilitation help control pain?

Veterinary Rehabilitation (aka physical therapy) is helpful to treat musculoskeletal pain for the following reasons: Guided movement and exercise help to strengthen tissues of the musculoskeletal system (muscles, tendons, ligaments, etc.) and can help to stabilize an arthritic joint. This prevents further injury and pain over time. Additionally, exercise can immediately alleviate pain through its effects on the nervous system (by release of endorphins and stimulation of nerve receptors in and around joints that override pain).

How can we treat pain?

First and foremost, it is very important to try to identify the source of the pain. This can be very difficult at times and may require advanced diagnostics. Once a diagnosis is made it is much easier to formulate a treatment plan. Depending on the underlying problem, there are many different ways to treat pain. These of course include many pharmaceutical (drug) options, however, surgery, physical modalities/therapies, dietary supplements, and other methods are also frequently helpful and may have less side effects.

We frequently address pain associated with arthritis or other problems causing impaired mobility by a combination of the following options: physical therapy, controlled activity, weight management, low-level laser therapy, acupuncture, massage, pharmaceuticals, and/or supplements. In general, we utilize less invasive treatments and those with a lower risk of side effects first and only use invasive treatments such as joint replacements if non-surgical methods have not resulted in the desired improvement.

Please make sure to sign up at www.dogjoints.com to make sure that you will receive our next newsletter which will detail pain management strategies including commonly used drugs.

For questions, suggestions, to unsubscribe from future newsletters or to support our service and research efforts please contact us either via email (caninerehab@colostate.edu) or phone (970-297-5000) or mail (Dr. Felix Duerr, CSU-VTH, 300 W Drake Rd, Fort Collins, CO 80523).