



## Chelsea Animal Hospital Inc.

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### Alternatively Speaking: A Holistic Approach To An Injury-Free Summer Dr. Anne Carroll DVM, CVA

Ah, summer. It is a welcome return to warm long days and more outdoor fun for the whole family, including our dogs. Sometimes this means a leisurely stroll or supervising yard work, but often it is the time for chasing Frisbees, fetching balls, and going on long hikes and swims. Activity is terrific for moderating insulin stress and getting nutrient-rich blood into every corner of the body. But for dogs that don't exercise regularly or are at risk for injuries, some care is warranted to avoid a fun outing ending in an injury that may put a damper on the rest of the season. In this article we will discuss how to recognize potential problems in our dogs in advance and take action to reduce the chance of your dog being sidelined this summer.

In order to avoid injuries, let's first consider how they occur. When veterinarians see dogs with pain it is not usually from traumatic accidents. Most orthopedic issues start long before that first lameness visit, as chronic inflammation slowly weakens tissues until things degrade to the point of ligament failure, joint arthritis, or back pain. As four-legged animals, the dog's anatomy has different demands than their upright family members. Both front and rear ends must coordinate with each other to allow for the exquisite twisting and swerving they can do at top speeds. This requires a flexible spine. While strong bones are important, it is the "soft" tissues, the muscles, ligaments and tendons that orchestrate this coordination, tightening and stretching to keep the whole body in balance. Stretching stress is normal and helps the body know where it needs to strengthen. Just like a callus forms where skin is being rubbed, ligaments and muscles will strengthen under use. However if there is abnormal stress on a joint, or inflammation from dietary or circulatory issues, soft tissues weaken. Now they are prone to small strains, leading to more inflammation, scarring, and further decreases in strength and flexibility. With restricted range of motion injury is even more likely even during regular activities, and inevitably a visible failure occurs.

Ideally, we would take action before breakdowns happen by identifying areas needing protection. As young pups mature, we can look for physical and genetic factors that indicate orthopedic challenges. Take Eddie for example. He found his forever home in Vermont after leaving Puerto Rico with his littermates. It is hard to guess Eddie's heritage, he is an adorable mix, but overall he is built long and a bit low like a Basset Hound, with curved front legs. His body type means Eddie's joints and back will be at risk for stress, so we'd like a plan to protect them starting while he is young. Risk factors in other dogs may not be so dramatic but are no less important. For example, straight rear legs with little angle at the knees stretch knee ligaments like someone always going downhill, or high hips put excess load on front legs and upper back. Even with normal conformation, many purebreds are prone to knee, back or joint flaws that only become evident after months or years of use, so we need to physically protect developing bones and joints during growth. Toy breed pups can't jump off a chair without risking fractures, while large breed adolescent dogs do not have adult muscles to support their joints so should avoid hard exercise. Regular play is fine, but jogging or an hour of daily fetch sets the stage for arthritis and ligament failure later on, especially if the pup is overweight or eats too many processed carbs. Dietary inflammation weakens ligaments and is a major factor in the development of hip dysplasia (hip ligaments) and knee failures (cruciate ligaments) in susceptible breeds, especially if we have conformation stress as on those joints as well.

Beyond puppyhood, we still watch for clues that issues are brewing. Any lameness complaint warrants investigation, but dogs don't always advertise their aches and pains. Take Hackett for example, a 7 year-old Golden Retriever. He enjoyed romping outdoors with his older dog brother Buddy, and did not have any lameness to speak of. But his owners did notice that after hard play he would favor his right rear leg for a short

time before being normal again. They mentioned this at his annual exam and were starting joint supports and adjusting his diet but a few weeks later he came inside from playing on only 3 legs, and it did not get better. Despite the hobble, he could run just fine given the opportunity to chase a squirrel, so his owner was surprised when we diagnosed a torn right cruciate knee ligament. Hackett is not unique in the way he was injured or his response to pain. He did not do anything extreme, his knee simply gave out and the only clue of a smoldering issue was that occasional mild limp. Dogs largely ignore pain and may not feel a thing when motivated to run, so just because they can do so joyfully is not a guarantee they are ok. If a symptom recurs, even if minor, damage is occurring and it is time to intervene. Small tears and strains may cause passing soreness your dog may not even show, but like a worn tire that hits one too many potholes, a tissue will 'suddenly' give out completely when the body stretches farther than it can bear.

So now that we know how to keep an eye out for potential weaknesses, let's talk about ways to minimize the chance of injury. Early on, the focus is mainly on nutrition. To avoid inflammation we strive to keep the diet low in processed carbs and keep a lean weight. If possible, it should include some fresh foods known to support orthopedic structures such as chicken necks, or bone broth. Fish oils or turmeric can improve joint circulation, and cooked veggies can provide essential minerals. Your dog's diet should be discussed with your vet to meet their specific needs, especially if they are still growing like Eddie. He also had digestive concerns and needed a plain diet so we used whole-food supplements. These concentrates are also useful for more advanced issues like Hackett's injury, to go beyond dietary support to address active injury.

The second focus is appropriate exercise. Physical activity is essential to good health, but not all exercise is created equal. In Eddie's case, we need to limit or avoid activities that involve repeated high impact to his front end. He should not go jogging or play games that involve skidding or twisting stops, such as Frisbee or fetch. Instead we should teach him to swim, and fetch within the pond so he is not racing in and out of the water. Moderately flat and short hikes are also great, and dogs can do therapeutic exercises to help prevent or heal injuries just like we do. The need to modify exercise varies with the circumstances, but as a rule dogs should avoid activities that stress their weakest points, or that make them visibly sore. If you know your dog's favorite game causes stiffness, try to eliminate the most harmful part, go out individually to avoid roughhousing, or shorten play to avoid discomfort and substitute a new game like hide and seek. As a side note – never play fetch with a stick! Sticks become spears that can impale your dog's mouth if caught end first, whether in the air or from the ground where they landed like a javelin. Always use toys designed to be fetch sticks for safe play.

Of course we can't prevent all problems. For dogs with clear symptoms of pain, some degree of breakdown has occurred and then we add therapies to promote circulation and reduce active inflammation to assist healing. In our office we use nutraceuticals, Chinese herbs, acupuncture, chiropractic, homeopathy and electromagnetic therapy; but physical therapy, massage and Reiki are examples of the many other good options available. For Hackett's knee, we started supports while waiting to see if he was going to be a candidate for surgery. Besides diet and rest, and he is taking a mix of nutritional and herbal supplements to strengthen ligament tissues and increase circulation to his knee, which is key to healing. Since anti-inflammatory drugs can interfere with healing in the long run he switched to electromagnetic therapy at home, and so far he is able to use his leg carefully. Injuries to bone, muscle or ligaments take months to heal and longer to regain their original strength. So in the short term Hackett should be only going out for short bathroom breaks on leash, and for entertainment he has chew toys or can learn new tricks. When activity is reintroduced, it will carefully avoid stressing those knee ligaments for months to come. Whether he has surgery or not, physical therapy can be helpful to strengthen his injured leg and retrain him to use it normally again so he does not continue to stress his back or other leg out of habit.

Everybody has its potential orthopedic weaknesses. Being mindful of those issues and proactively addressing them is the ideal approach to allow our dogs to enjoy a physically active life for as long as possible. That does not mean keeping them in a bubble, they need to enjoy the physical world, running and jumping if only to express how happy they are to see us. But we can help minimize stress to their at-risk areas if we teach them to find joy in a belly rub as much as leaping up and down. So whether you are staring off with a young healthy dog, or helping one through orthopedic problems later in life, check in with your vet to discuss how to use alternative medicine to nourish, strengthen and to restore mobility so they can have the most active fun summer to suit their abilities, including some jumping, injury free!

*Dr. Anne Carroll is owner of the Chelsea Animal Hospital where she and her associates practice conventional medicine and surgery as well as several alternative modalities including traditional Chinese acupuncture and Chinese herbal medicine. For more information on alternative veterinary medicine visit their website at [www.chelseaanimalhospital.com](http://www.chelseaanimalhospital.com) .*