# Prolotherapy

## for stifle injuries

*by: Deva Khalsa DVM*

Sally was young, in Rottweiler years, to be diagnosed with a cranial cruciate injury in her right knee. She was only four years old. Sally was one of those outgoing, exuberant and loving Rottweilers whose tail seemed to wag her whole body. She loved life but her painful knee was putting a crimp in her desire to live it to the fullest.

Sally's owner opted for surgery to repair the torn ligament and this course of action was successful. But in less than a year, her left knee began giving Sally problems. Her owner was very careful with her exercise and couldn't remember an incident where she could have injured her left knee. Sally was holding her left rear leg off the ground for the first few steps and then tiptoed on it while she walked. Finally, after many minutes, she began cautiously walking on her left hind leg.

We were concerned that Sally was putting too much weight on the right leg which had already undergone surgery. This time, her mom opted for Prolotherapy to treat her left knee. We'll talk more about Prolotherapy, but let's first find out what's really happening in our dogs' knee joints and why we're seeing so many knee problems.

Webster's New Collegiate dictionary defines Prolotherapy as: "the rehabilitations of an incompetent structure, such as ligaments or tendons, by the induced proliferation of new cells".

Ligaments provide stability to the complex knee joint. Two of the knee's four ligaments are attached in a crosswise fashion and called the cranial and caudal cruciate ligaments. These ligaments act together with the lateral collateral ligament to maintain stability of the stifle through its full range of motion.

In the past, veterinarians attributed cruciate ligament damage to sports injuries but recent research has found that cruciate injuries are not as simple and straightforward as once thought. It's been found that dogs over four years that are spayed or neutered are considerably more likely to suffer cruciate tears than dogs that remain sexually intact. Cruciate ligament damage is seen much more frequently in overweight, neutered, middle-aged dogs. A much smaller group of genuine sports injuries do occur in dogs who push the physical limits of their bodies through over-exertion. An example of this is jumping high to catch a Frisbee and landing over and over on the same hind leg.

Surprisingly, most cruciate problems do not appear suddenly – after a sudden twisting movement or jumping from an elevated location. Even when a cruciate tear appears to be acute, inflammation and weakness in the area more often than not precede and contribute to the injury. Researchers agree that something more than a simple accident is to blame because it's very common for a dog's other knee to go out not long after the first one.

Another group of dogs that suffer from this disease are those receiving corticosteroid medications for long periods. It's uncertain if these pets develop the problem because they gain weight or because corticosteroids decrease the strength of their ligament. These observations indicate that the endocrine system and internal hormones play an important part in maintaining joint health.

The thyroid hormone would also play a part in this. In The Canine Thyroid Epidemic, Dr. Jean Dodds states, "Hypothyroid animals can also experience loose joints, which lead to patellar subluxation (partial dislocation of the kneecap) from weakened or torn cruciate ligaments." The intricate hormonal interactions within our dogs' bodies are affected by early neutering, the xenoestrogens present in commonly used garden products such as Round Up and the toxic effect that many topical flea and tick products have on the canine thyroid gland.

Ligaments are fibrous tissues that connect bone to bone to make a joint. If you look at a fresh ligament, it would appear as a white sheet or band. Its appearance is white because there is very limited blood supply to ligaments; therefore, they heal very slowly. When they do finally heal, they are never as strong, often at only 20% of their original strength, making them more prone to re-injury.

Getting back to Sally, her mom had several choices for her treatment, one being rest and NSAIDs. This was part of the therapy that she had chosen for Sally's right knee but before long, Sally needed surgery. When a dog injures his knee, the pain forces him to rest it. If we humans hurt our knee and then take a drug to kill the pain, we know that we must continue to protect that knee. Our dog however, will run on the knee and further injure it when he is given a pain killing, anti-inflammatory drug. Both steroids and NSAIDs have been irrefutably proven to retard healing. The injured is continuously re-injured. The consequence of all this may be expensive knee surgery.

Moreover, recent research shows that some types of NSAIDs, COX-2 inhibitors, can also have an adverse effect on bone healing and impair ligament healing. This would include popular NSAIDs such as Rimadyl® and Metacam®.

Sally's mom also had the option of a combined mix of holistic options including rest with acupuncture treatments, herbs and

## Homeopathy for Knee Issues

| Remedy | Potency | Indications | Dosage |
|---|---|---|---|
| Ruta grav | 6x or 30x | ligament injury - especially in the knee | 3 to 4 times per day |
| Arnica | 6c to 30c | acute musculoskeletal injuries | 4 times per day |
| Bryonia | 6c to 30c | lameness that is worse after exercise | 3 times per day |
| Rhus tox | 6c to 30c | lameness that is worse after resting | 3 times per day |
| Gelsemium | 6c or 6x | luxating patellas | 2 times per day |

homeopathy. This can be very successful but the hard part is keeping an active dog quiet for several weeks. The minute most dogs feel and look better, both he and his owner give a big sigh of relief, stop leash walks and - bada boom bada bing - that ligament is once again strained and damaged.

Certain homeopathic remedies are excellent for helping with ligament tears. The enclosed chart presents several homeopathic remedies that are helpful with knee problems, along with their indications.

Because Sally had a history of knee problems, her owner opted for Prolotherapy. Prolotherapy has been practiced for well over 50 years. It's both inexpensive and effective. Research with rabbits in the 1950's showed that damaged ligaments treated with Prolotherapy increased almost four times in size.

Prolotherapy treatment is simple and straightforward. Injections of a specific mixture of proliferant substances are placed in the ligaments around the joint, stimulating them to regenerate. The fluid also stimulates new cartilage growth in the joint. Prolotherapy is effective in the repairing of collagen, ligaments and connective tissue.

After I became certified in Prolotherapy, it soon became my treatment of choice for cruciate injuries. The effects are often seen immediately and healing is vastly accelerated. While it's still a good idea to keep your dog quiet after the first treatment, the healing is so accelerated that the quiet period is shortened to a few days. In some cases only one treatment is needed. In others two to three treatments may be necessary. Some veterinarians do it without sedation or anesthesia. I decide along with the owner whether light anesthesia should be used by evaluating the patient and his individual personality and pain tolerance.

After the Prolotherapy, Sally did beautifully! I also prescribed the Chinese Herb Ligament Repair by Jing Tang Herbal along with the homeopathic remedies *Ruta grav* and *Rhus tox*. There was one last thing we had to fix however. The knee she had surgery on the year before was bothering her. It had been stressed because she had shifted all of her weight to that leg when the left one was injured. My associate did a special type of gold bead procedure on her called gold wire.

Allow me to explain the theory behind gold bead or gold wire implants. Dr. Grady Young pioneered gold bead implants in the early 1970's. It works incredibly well for hip dysplasia, with a 98% success rate for dogs under seven years of age. The procedure consists of tiny gold beads or wires inserted through a needle into acupuncture points between the muscles or under the skin while the patient is under anesthesia or sedation. The gold wire procedure performed on Sally was slightly different. Tiny gold wires were placed in just a few acupuncture points and this could be done while Sally was awake. It's usually even more successful than the gold bead technique and it worked great for Sally.

Sally's story has a very happy ending. She still wags her whole body with her tail and is one of the most active and playful dogs I have ever met. She has not lost her puppy-like enthusiasm for life. But now she can enjoy the rest of her life without daily pain medication for her knees.

Holistic healing has many faces, but the bottom line is a stronger and healthier body and Sally is a shining example.

*Since beginning her holistically oriented veterinary practice over 25 years ago, Dr. Khalsa has been incorporating homeopathy, acupuncture, Chinese Herbs, nutritional advice, allergy-elimination techniques such as N.A.E.T and also J.M.T. into her approach. She coauthored, 'Healing Your Horse: Alternative Therapies' (Howell Book House, 1993), and most recently authored, 'Dr. Khalsa's Natural Dog' (Kennel Club Books, 2009), a book best described as a 'holistic bible' for dog owners. Dr. Khalsa is a Fellow and Professor of the British Institute of Homeopathy. She has lectured both nationally and internationally.*