

A CASE STUDY

Speedier Recovery After ACL Surgery

By Dennis Arp
Contributing Editor

The wide-open fields of doggie day care were the perfect place for Diamond to run and play with pals—until the boxer started to need some special care of her own.

Danielle Mayo, Diamond's owner, noticed the pup favoring her right hind leg, then limping and struggling to climb the stairs. Over the next few months, Diamond also showed signs of injury to her left hind leg, and it turned out she had cruciate ligament injuries to both rear legs.

Geoff Campbell, DVM, owner and operator of Edinburgh Animal Hospital in Chesapeake, Va., has performed dozens of cruciate surgeries using the extracapsular/Securos technique, but never on two legs at the same time.

He made an exception for Diamond to save Mayo money, to shorten Diamond's recovery time and because he had a new tool to mitigate post-operative pain.

Following is a study of the case and how Class IV laser therapy played a role in treatment planning and in post-operative recovery.

PATIENT

Diamond, a 2-year-old, 49-pound female boxer who loves to romp at the day care center for dogs where his owner works.

PROBLEM

Bilateral anterior cruciate injuries. Diamond also suffered a meniscal tear on one side.

Money is tight for Mayo, and concerns about the cost of surgery had caused her to put off a procedure to repair Diamond's ligament damage. But when the dog started alternately limping on both back legs and struggled to squat to eliminate, she knew she needed to go ahead with surgery.

She took Diamond to Dr. Campbell, she said, because of his 17 years of experience and his appreciation for the special circumstances of clients.

TREATMENT PLAN AND PROCEDURE

In cases of bilateral/anterior cruciate ligament tears, Campbell typically likes to perform repair surgery on the most acute side first, allowing ample recovery



First, laser therapy treatment is administered while the patient is still anesthetized.

PHOTOS BY DR. GEOFF CAMPBELL



In all, Dr. Campbell uses five treatments on ACL-repair patients.

time before repairing the second side.

"We like to ensure that the dog always has a 'good' leg for support," he said. "There's concern not just about managing pain but also about the owner being able to get the dog outside."

Since fall 2009, however, Campbell has been able to rethink treatment plans and post-op protocols because he acquired a Companion Therapy Class IV laser for his two-doctor practice. He's found that the laser reduces pain and swelling associated with surgery and helps speed recovery within the joints themselves.

Mayo didn't balk when

Campbell told her laser therapy was part of the treatment plan.

"I had heard it worked well, so it didn't scare me at all," she said. "It was something I was glad she would be getting."

Campbell performed extracapsular/Securos repair procedures to repair Diamond's knees and initiated a course of five therapeutic laser treatments using the "clean incision" setting. The first treatment came immediately after surgery while the dog was still anesthetized, and the others were performed on consecutive days afterward. The boxer also received oral Rimadyl and tramadol for pain management.

RESULTS

His experience told Campbell that at suture removal 10 days after surgery the affected limb would not bear weight, but by the 30-day follow-up exam, it would be 80 percent weight-bearing.

With Diamond, the surgically repaired legs were almost 100 percent weight-bearing at 10 days.

"From my experience, that's unheard of," the doctor said. "All I can attribute it to is the laser, because every other aspect of surgery and post-op treatment was the same."

Mayo was extremely pleased to see Diamond respond so well.

"After two days she was trying to run and jump," Mayo said. "After six days it was all I could do to hold her back."

At the end of May, as the 30-day post-surgery checkup approached, Mayo continued to lead Diamond through simple controlled walks, helping her to ease back into exercise. The dog occasionally favors one leg or the other, especially after she has been down for an extended period.

"But overall she's doing great," she said. "It's exciting to see how far she is down the road to recovery."

LONG-TERM PROGNOSIS

Because Diamond experienced ACL injuries to both hind legs at such a young age, "there's a strong possibility"

she has a genetic predisposition to joint weakness, Campbell said. He expects to see problems with osteoarthritis down the road, and Mayo has begun a daily regimen that includes a glucosamine supplement.

The good news is that the Class IV laser has proved effective in treating osteoarthritis and other joint conditions. In fact, helping older pets deal with hip dysplasia, back problems and other ailments of aging is the main reason Campbell added the laser to his pain-management arsenal.

"We've seen the laser repeatedly make a difference, especially with quality-of-life issues," he said. "Numerous owners in the past were close to deciding to euthanize, including my brother, whose 14-year-old lab could hardly walk. But after the second treatment he was doing things he hadn't done for as long as two years."

For Mayo, the important test will come when she gets Diamond back on the fields at day care so she can resume her romps with her friends.

All Mayo has to do is say the names of other dogs at day care and Diamond perks up, as if to say, "Put me back in, coach."

Soon, Mayo says. Soon. ●

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