

LASER CASE STUDIES

A SPECIAL ADVERTISING SECTION

Wound Healing and Vestibular Disease

By Mary Carter
For The Education Series

This is the second in a series of case reports from clinicians using Class IV therapeutic lasers. The following excerpts are examples of the laser's role in treating open wounds and acute vestibular disease.

"Moose"

On Dec. 2, 2011, a 5-year, 9-month-old neutered male German shepherd presented with an open wound from a toe amputation at another veterinary hospital. The initial history was of an inflamed digit that did not respond to antibiotic therapy. When the nail sloughed off the owner agreed to digit amputation. The incision dehiscd.

Upon presentation to our hospital he was on unknown doses of enrofloxacin and deracoxib, gabapentin 500mg once daily, and acepromazine as needed. The affected digit was the fourth digit of the left front foot. Some granulation tissue was present, but there was a deep wound where the remaining bone of the affected digit was.

There was purulent discharge and some erosion and ulceration of the apposing skin on both the fifth and third digits.

Histopathology was pending from the previous veterinarian. Until there was proof that it was not neoplastic in origin, no laser therapy could be performed. The foot was treated with VetriCyn spray and bandaged. The owner was able to change bandages at home.

Given the bony nature of the submitted sample it took several days for the sample to decalcify for a histopathologic diagnosis. The report revealed furunculosis and mild chronic osteomyelitis. No evidence of neoplasia was found so laser therapy was instituted. Seven laser treatments were performed Dec. 9-22.

The first culture was misplaced, so the culture results were delayed but came back with light growth of methicillin resistant coagulase negative Staph. spp., which was sensitive to amikacin, chloramphenicol and mupirocin., and intermediately sensitive to doxycycline. Chloramphenicol was started on Dec. 19 at 35mg/kg (1450mg) tid for 21 days.

Follow-up radiographs of the foot were performed at the end of the 21 days to assess for evidence of osteomyelitis. Radiographs were clear at that time. No further medications were needed, and Moose healed fully.

Case report contributed by:
Heidi S. Gaultney, D.V.M.
Oxford Veterinary Hospital, LLC
Oxford, Pennsylvania

"Joma"

Joma was a 14-year-old shepherd mix who presented after an acute onset of vestibular disease three weeks previously. The owners had been away on a cruise, placing Joma with a pet sitter when the vestibular signs occurred. The pet sitter had her admitted to their veterinarian for supportive care.

Joma lay in lateral recumbency for almost two weeks, unable to stand or walk on her own. She was gently turned and cleaned daily but did not receive any other physical therapy or treatment.

When the owners returned home from their vacation, her condition had not improved at all and she could not walk on her own or stand to urinate or defe-

cate on her own. They were told by their veterinarian that her quality of life was very poor and they were advised to euthanize her. The owners elected at that time to bring her home for a few days to see how it would go.

Joma was presented for a rehabilitation evaluation a week after being home. She was carried into the hospital on a stretcher. She was not on any medications except for Deramax for her chronic arthritis.

Joma was unable to stand on her own but could stand when assisted. She could take only two or three steps before falling to her right. She had a right head tilt but no nystagmus was present.

Joma had good strength as each leg was picked up one at a time and she was able to stand three-legged for a minute. Joma was encouraged to take a few steps but would only take two or three steps before falling to the right.

We started a few simple exercises with Joma on the physioball and gently rolled her forward and backward until she started placing both front legs on the floor. While on the ball her hind legs were extended to the floor and then she was gently rolled side to side to allow Joma to take a few steps to the left and then to the right.

We then placed Joma on the mat in sternal recumbency and gave her a laser massage. We used the chronic arthritis preset protocol with the large contact ball treatment head and lasered her neck, shoulders, spine and hips. The base of her right ear was also treated.

During the laser treatment, you could see how much Joma was enjoying her treatment as she would lean into the laser wand. When the treatment was finished, we stood Joma back up on her feet and she was able to stand with very little assistance. She then proceeded to take about 10 steps across the room to her owner's side.

We placed a sling around her abdomen and a leash around her neck and walked her outside. Joma immediately got in position to defecate and then she squatted to urinate. Joma walked to the car and was placed in the back seat to go home. She was instructed to return the next day for another treatment.

The following day, Joma was walking with minimal sling assistance. She could walk up one step and step over cavaletti rails. She was able to weave in and out of cones as well without falling over. We placed her on the physioball again for stretching and weight shifting and she had another laser treatment. She was instructed to return again the following day for another treatment.

The next day Joma trotted into the office! She was able to walk without stumbling or falling and needed no assistance with a sling. She had another laser session and was then scheduled to have six more treatments using three treatments the first week, two treatments the second week and one treatment the third week.

Joma had a remarkable recovery and the owners were extremely grateful that the Companion Laser gave her a



Moose's foot upon presentation, Dec. 2.



Moose's foot, post-treatment, Dec. 22.



Close up of Moose's foot, Dec. 22.

second lease on life. She continued to return for maintenance laser treatments approximately once a month.

She eventually needed to add more pain management for her arthritis, however, and the owners also sought out acupuncture as an adjunctive treatment. Joma had a good quality of life for another two years and recently passed away at the age of 16 after a bout of seizure activity.

Case report contributed by
Michelle Bishop, D.V.M.
Rau Animal Hospital
Glenside, Pennsylvania

This Education Series story was underwritten by Companion Therapy Laser of Newark, Del.