

Clinicians report laser therapy successes

By Mary Carter
For the Education Center

This is another in an ongoing series of case reports from clinicians using Class IV therapeutic lasers. In its continuing effort to collect and share clinicians' real-world laser experiences, Companion Therapy Lasers, the veterinary division of LiteCure LLC, recently conducted a contest asking veterinarians to submit laser therapy cases that they found remarkable.

Ninety-six cases were received from five countries and from 28 states. Over three rounds of evaluations, a panel of seven practicing veterinarians reviewed and

scored the cases to determine a winner, a runner-up and four honorable mentions.

Contest results and full case reports may be viewed at www.litecure.com/companion/2013/12/case-contest-winners-announced/

The following and several others of the submitted cases will appear in future editions of the Education Center in Veterinary Practice News. ●

Mary Carter is a freelance writer who has written on her areas of interest including disaster preparedness, especially as it affects the pet populations and the elderly, epidemiology and laser surgery.

Bosley

Supervising veterinarians: Sara Hogle, DVM and Carrie Wright, DVM

Practice: Baring Boulevard Veterinary Hospital, Reno, Nev.

Patient Name: Bosley

Patient age, gender: 2 years old, MN

Breed: American Staffordshire terrier

Symptoms: Severe diffuse ulcerative and erosive skin lesions; very pruritic and painful on presentation.

MEDICAL HISTORY

Patient was brought in by Animal Control for evaluation of severe ulcerative skin disease. He had been treated with a single dose of Ivermectin, put on prednisone 20mg SID and Cephalexin 750mg BID. Discontinued prednisone, started Ivermectin (to be given 30 days post negative skin scraping), bathed every other day with Pyoben (follicular flushing) shampoo, and continued Cephalexin PO BID.

INITIAL ASSESSMENTS

Cytology performed on 1/21/13 at presentation showed high numbers of polymorphonuclear leukocytes, eosinophils, and cocci bacteria. A skin scrape showed high numbers of Demodexmites. Suspected worsening of Demodex due to immunosuppression by prednisone prior to presentation.

INITIAL DIAGNOSIS

Severe generalized Demodicosis (likely worsened by prednisone immunosuppression)

TREATMENT INFORMATION

Laser make and model: Class IV Companion Therapy laser (Model CTS 15)

Frequency of treatment: Laser therapies EOD starting on 1/29 through 2/4/13, then roughly weekly thereafter.

Protocol: Used light skin and light coat parameters. Treated roughly 85 percent of integument with ~3J/cm² (total of 15 treatment areas to cover affected area). Each treatment session delivers 1080J for area about 6" x 10" (thus ~3J/cm²).

Laser mode: CW (continuous wave)

Power: 6 watts

Treatment time: 3 minutes x 15 treatments.

Total energy delivered: 1,080 joules each treatment

Areas treated: Approximately 85 percent of entire integumentary system (majority of skin is affected, primarily trunk/dorsum/head)

Approximate size of area treated: 3200 cm²

Other treatment details: Small non-contact treatment head held ~2 to 3 cms from skin surface. Concurrently treated with Ivermectin, Cephalexin, and topical therapy with follicular flushing shampoo (Pyoben).

Assessment used subjective visual assessment of skin characteristics throughout therapy period; skin erythema/inflammation, rate of wound healing/resolution and patient comfort.

RESULTS

Patient's skin lesions/disease showed rapid reduction in erythema, crusting and pruritis leading to marked improvement in patient's comfort level while managing/treating generalized demodicosis/pyoderma. Overall healing progression was dramatically accelerated by laser therapies and most importantly comfort was markedly improved throughout laser therapy period.

Laser therapies were discontinued on 3/1/13 due to near-complete resolution of all skin lesions. Last skin scrape recheck was on 8/10/13 and continues to be negative for mites. Patient is in great spirits and more energetic than ever before.



1/21



1/22



1/31



2/8



2/28



3/1

Jazzy

Contributed by: Megan DeRoach, CVT

Supervising veterinarian: Nate Stanglein, VMD

Practice: Stanglein Veterinary Clinic, Northampton, Pa.

Patient Name: Jazzy

Patient age and gender: 2-year-old spayed female

Breed: Greyhound

Symptoms: Hit by car, in mild shock, painful, degloving injury, road rash.

MEDICAL HISTORY

No previous history of medical problems.

INITIAL ASSESSMENTS

Radiographs

INITIAL DIAGNOSIS

Trauma, degloving wound on right hind paw, bone exposure of metatarsal 2.

TREATMENT INFORMATION

Laser make and model: Companion Therapy Laser CTL-10

Frequency of Treatment: 6/10/13 — Lasered at 6w/4min and wet-to-dry bandage change

6/11/13 — Lasered at 6w/4min and wet-to-dry bandage change

6/12/13 — Lasered at 6w/4min and wet-to-dry bandage change

6/13/13 — Lasered at 6w/4min and bandage change—switched to regular bandage at this time

6/15/13 — Lasered at 6w/4min and bandage change

6/17/13 — Lasered at 6w/2min and bandage change

6/19/13 — Lasered at 4w/4min and bandage Change

6/21/13 — Lasered at 4w/4min and bandage change-Refilled Gabapentin and Clavamox

6/24/13 — Lasered at 4w/4min and bandage change—recommended bandage changes every two days now

6/27/13 — Laser @ 3w/2min and bandage change

7/1/13 — Laser @ 3w/2min and bandage change

7/6/13 — Laser @ 3w/2min and bandage change

7/9/13 — Laser @ 3w/2min and bandage change

7/13/13 — Laser @ 3w/2min and bandage change

7/16/13 — Laser @ 3w/2min and no more bandages

Protocol used: Contaminated wound setting

Laser mode: CW (continuous wave)

Power: 6 watts initially, was decreased as size of wound shrank

Treatment time: 4 minutes initially, decreased as size of wound shrank

Total energy delivered: 1440 Joules initially, decreased as size of wound shrank

Areas treated: Degloved area on right hind paw.

Approximate size of area treated: 15 cm²

Other treatment details: Used the large, non-contact treatment head, held about ½ – 1 inch above the skin. Was put on a course of Clavamox, gabapentin and Rimadyl. Daily wet-to-dry bandage changes for four days, then switched to every other day regular bandage changes.

RESULTS

Patient was very responsive to treatment and the wound continued to show improvement at each laser treatment. We were all very pleased with the progress shown and definitely feel that the laser played a major part in her recovery.

DISCUSSION

Jazzy was hit by a car on the evening of June 9 and was initially triaged by Valley Central Emergency Center, which debrided the wound, placed the



6/10



6/13 (close up)



7/9



6/21



7/1



7/16

first wet-to-dry bandage, initiated P-Lyte fluids and gave a dose of Buprenorphine and Cefazolin IV. Jazzy was discharged the following day to the care of our clinic, where laser therapy was started.