

THE USE OF THERAPEUTIC LASER FOR SEVERELY INFECTED BITE WOUNDS AND SUBSEQUENT SKIN SLOUGHING ON AN ABANDONED LABRADOR MIX

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History

A young to middle aged, spayed, female, yellow Labrador retriever mix was found severely depressed and lethargic with multiple infected bite wounds and abscesses on her head and neck in a small village 1 hour outside of Chiang Mai, Thailand. The area where the dog was found has many stray and owned dogs that roam in packs and are known to be territorial to other dogs. The wounds appeared to be at least a week old. Her temperament and demeanor, especially around people, and the fact that she had a spay scar suggest that she had previously been owned and was likely abandoned. Search for her owners was unsuccessful. The dog was affectionately named, "Stacey" by our team.

Presentation

Upon presentation, Stacey was depressed, dehydrated, pale, and had a fever. She had a large necrotic and maggot infested wound covering the dorsal aspect of her head and dorsocranial neck approximately 9.5cm by 14cm. The skin at margins of the wound was necrotic and a large area of skin in the center of the wound had sloughed.



Dorsal head and neck wound at presentation
September 5, 2016



Wound on Day 3 of treatment
September 7, 2016



Wound on Day 10 of treatment
September 14, 2016

Additionally, there were more than 10 puncture wounds on her ventral and lateral neck, several of which had become maggot infested abscesses. She also had a corneal ulcer OS and otitis externa AU. Blood work revealed leukocytosis, anemia, and hypoalbuminemia.

Treatment

Stacy was hospitalized and started on IV fluids, pain meds, and antibiotics. She was anesthetized and her wounds thoroughly explored and debrided. Laser therapy on the wounds and abscesses was initiated: Setting 5 (1-250Hz) for 10 minutes followed by Setting 1 (50Hz) for 10 minutes on the large head wound, Setting 5 (1-250Hz) for 2 minutes on each puncture wound and an additional 2 minutes on Setting 4 (1000-3000Hz) on each of the abscesses. **In all treatments, the ACTIVet's Blue wavelength was added for infection abatement.** A wet to dry bandage was applied to the lesion on Stacey's dorsal head and neck. The following day, the skin margins on the head wound looked healthy and there was no sign of infection. The wet to dry bandage was changed and laser therapy performed daily. The puncture wounds and abscesses on her neck healed within one week of treatment. The large wound on her dorsal head and neck markedly improved after several treatments. The wound had dramatically reduced in size after 3 weeks of treatment and wet to dry bandages were discontinued. Instead, a simple bandage was applied daily to prevent Stacy from scratching the wound. Laser treatment was reduced to Setting 5 (1-250Hz) for 10 minutes (plus Blue). After 3 weeks of appropriate



Wound on Day 21 of treatment
September 25, 2016



Wound on Day 42 of treatment
October 16, 2016

treatment, the corneal ulcer and otitis externa had completely resolved. The dorsal head wound had reduced to less than 1cm in diameter after 6 weeks of treatments and no longer required a bandage.

Discussion

Infected wounds on dogs and cats are extremely common in Thailand. The addition of laser therapy to appropriate

medications and wound care can reduce healing time and result in fewer complications.

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