

# Laser Therapy Helps Burn Victim Warm to the Challenge of Recovery

by Dennis Arp  
for Veterinary Practice News

By all odds, the spunky little Jack Russell mix with the incredibly bright eyes and growing affinity for chasing birds really shouldn't be alive today.

She was locked in a crate at home when the building caught fire, generating so much heat that the plastic crate lid melted and dripped, leaving her with nasty burns over most of her body. The lone reason she even made it as far as the St. Charles Hospital and Clinic in St. Charles, Mo., was that the ambulance she rode in after being rescued happened to be outfitted with an oxygen mask for small animals.

It was the only one of 22 in the area so equipped.

"Her burns were extensive and she was unconscious when she got here," recalled Mike Crecelius, DVM, a small-animal practitioner who treated her at the clinic. "Her prognosis was quite poor."

That now, five months later, the puppy is doing quite well is a testament to a number of factors—among them the attentive care of clinic staff, a swiftly implemented care plan that included laser therapy, and, in no small measure, the will to survive exhibited by the dog herself.

As a case study, her story illuminates the power of a committed, creative effort in the face of long odds.

Even the patient's newly minted name reflects the glow she has brought to the life of the clinic and to those touched by her story.

Ember.

"We were quite clever," said Debbie Decker, the 15-year clinic office manager who adopted the resilient puppy.

**Patient:** A 9-week-old, 5-pound Jack Russell mix named Ember.

**Problem:** Extensive burns to the head and along the back; tips of ears charred off; considerable sloughing on trunk.

**Treatment plan and procedure:** Dr. Crecelius has treated a fair number of burn victims in his more than 30 years as a practitioner, but Ember's case is one of the worst he has seen.

She presented unconscious Dec. 15, 2010, and he quickly worked to stabilize her and assess her burns. As she regained consciousness, pain medication became a more important part of the mix.

A consultation with the dog's owner established that the owner was not in a position to pay for her treatment, so he relinquished ownership to the clinic. During the first few weeks of care, the puppy went home with Crecelius.

From the beginning of her clinic stay, Ember was winning over hearts. Even on her most painful days, she seemed to look into staff members' eyes and tracked their movements in exam and treatment rooms.

Also from the start, Crecelius worried that staff efforts would be in vain. Often burn patients—even those whose skin damage isn't life-threatening—suffer thermal and smoke damage to their lungs that causes expectations to swiftly decline, he explained. Em-



ber's brother was in the crate with her and didn't survive.

"We were surprised she didn't succumb," the doctor said.

To a treatment regimen of burn gels, bandaging and antibiotics, Crecelius added Class IV laser therapy administered every day for the first week of laser treatment, then three times a week thereafter. In previous wound cases, he had found the clinic's Companion Therapy Laser effective in stimulating healing.

The clinic has had therapeutic laser equipment since 2009, when a staff member attended a demonstration and was impressed by its effects. Clinic administrators chose the LiteCure Companion Therapy by Litecure laser based on its reputation for reliability and return on investment.

Despite the stories of success, Crecelius was skeptical.

"Highly skeptical," he said. "But I'm on board now."

As the clinic has used the laser to treat degenerative joint disease, otitis, wounds, post-operative pain and other conditions, Crecelius has come to see the light. It also helps that he has enjoyed relief for his own knee, on which he had cruciate repair surgery years ago.

"I don't understand why laser therapy isn't used more in human medicine," he said.

So the doctor was quick to include the laser in his treatment plan for Ember, using the contaminated-wound setting at 2 watts. And Ember started healing faster than anyone at the clinic expected.

"Now, was she healing faster because of the laser, because of her young age or both? Who knows?" Crecelius said. "All I know is we were experiencing success."

It wasn't long before Ember didn't require pain medication anymore. But in her own mind, she did require the attention of everyone coming into the clinic.

"She became a little celebrity," Decker said.

**Results and long-term prognosis:** One of those smitten with Ember as office pet is clinic client Sharman Klinefelter.

"She projects a very special I'm-not-afraid attitude," Klinefelter said. "When I open the door, she barrels over to see me. And she doesn't run, she hop-runs – as fast as her little legs can carry her."

Klinefelter wanted to do something nice for Ember, so when Crecelius suggested she start a campaign to outfit the other 21 St. Charles County ambulances with animal-size oxygen masks, she and her sister took photos, made posters and put collection jars around town. By late March, the effort had netted \$1,200—enough for 20 masks, with one more to go.

"It was easy," Klinefelter said. "I'm not a great photographer, but Ember's spirit comes through in those pictures, and people want to do what they can to help."

These days, Ember is providing more help as a poster puppy than she needs herself. She will always have some scars, but she didn't need any skin grafts—to the surprise of many on her care team. Two months after she first came in, she was essentially healed, Crecelius said.

Decker is convinced laser therapy played a "huge role" in Ember's recovery, and she couldn't be happier.

"She's quite a little treasure," she said.

