

# Radiation unit treats patients with paws

**Facility offers cancer therapy for pets that mirrors treatment for humans**

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With the completion last month of a \$2 million localized radiation therapy unit for animals with cancer, sick pets in the Columbia area and beyond have a stronger chance for survival.

South Carolina Veterinary Specialists, located at Fernandina and Piney Grove roads, is the first veterinary group in the state to offer the treatment regimen known as intensity-modulated radiation therapy.

Just like for humans, the state-of-the-art therapy enables the ever-growing team of veterinary oncologists and internists at the center to deliver high doses of radiation specifically to an animal's cancerous cells, while minimizing harmful exposure to nearby healthy tissue and cells.

The aim, depending upon the scope of the disease, can be anything from saving or extending the life of your pet, to avoiding an amputation.

"That's a brand new technology — for veterinary medicine, anyway. And it's a much better way, technology-wise, to deliver the treatment with less side effects: less burns, skin burns, or cataracts, or inflammation of the throat or whatever you're irradiating," said Brett Feder, a medical internist, administrative manager and one of five co-owners of the facility, all of whom treat cancer either in humans or pets.

A \$200,000 linear accelerator in the 2,600-square-foot new unit generates the high-dose radiation. Aided by computer imaging from a CT scan working in conjunction with three wall cameras connected to a computer bank, the radiation is guided by a three-dimensional model of the cancerous tumor.



PHOTOS BY TRACY GLANTZ/TGLANTZ@THESTATE.COM

Radiation therapist Cindy Seifstein and technician Charles Gossett prepare Aubrey, a 6-year-old German shorthaired pointer, for radiation treatment at South Carolina Veterinary Specialists at Fernandina and Piney Grove roads.

"One of the problems with radiation, if you don't have this three-dimensional machine moving (180 degrees over the sedated pet)," is collateral damage, Feder said.

Cancer treatment in pets is growing as medical advances are made in treating humans.

Hassan Alkhatib, a radiation physicist who treats human cancer and one of South Carolina Veterinary Specialists' co-owners, uses his expertise and experience to help the facility's staff transfer gains made in human cancer treatment to the treatment of pets, Feder said.

In addition, as technology advances are made in human cancer treatment and more advanced equipment evolves, existing equipment is converted to veterinary uses, Feder said.

"There is more and more work being done, especially at the specialist level, between veterinarians and human specialists, in both directions," he said.



Gossett and Dr. Becky Brown comfort Aubrey as anesthetic takes hold before treatment. The facility sees patients from all over the area including Augusta and Myrtle Beach.



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Trapper, a 10-year-old lab, undergoes a CT scan. The new radiation treatment could extend a pet's life or prevent an amputation.



Dr. Pam Lucas rewards Aubrey, a 6-year-old German shorthaired pointer, with treats as technicians Ericka Blakely and Jamie Oeters watch. Aubrey has become a fan of the staff at S.C. Veterinary Specialists.

Many pet owners — from far and near — know the South Carolina Veterinary Specialists complex as the emergency clinic for pets, which the 9,000-square-foot treatment center becomes at night, making the complex a 24-hour-a-day, 365-day-a-year operation.

The complex also features a 14,000-square-foot therapy center, where pets are rehabilitated after illnesses and treatments.

Feder said the treatment center draws 20 to 30 pet patients per day, and is one of only two pet radiation facilities in the state; the other is an independent operation in Greenville. There are two pet specialty practices in Charleston but no pet irradiation veterinary services, and the facility in Columbia draws large numbers of pets from the Augusta area, Feder said.

The facility, which only accepts pets referred for specialty services by other vet-

erinarians, has grown from two doctors to seven in more than a decade, including three internists, Feder said. And they are growing again, searching for another two oncologists with a need for third, he said.

For Pam Lucas and Becky Brown, the two medical oncologists on staff, the whole mission is quality — quality of care and quality of life for the animals they see each day.

Lucas sees patients with cancer, devises a treatment plan based on the type of cancer the patient has and where it is located in the body, then executes that plan, she said. That treatment plan may involve surgery, radiation, chemotherapy or a combination of treatments.

The Columbia facility has become a place of hope for pets and their human owners from distances as far away as Myrtle Beach, Charleston and Augusta, she said.

A lot of the cancers they see in pets mirror cancers in people, just at an accelerated rate, Lucas said.

“A lot of people think of radiation and chemo as what they see on TV and in movies, and there is a visceral reaction to cancer and to chemo.

“But when you see what these guys actually go through, (our) goal is quality.”

Treating cancer in pets is not right for every family and for every pet, Lucas said, especially given considerations of expense, time, distance, separation from the pet, and in some cases, the family's own personal experiences battling cancer in humans.

But it is nice to be able to offer the therapy for those who want it, they said.

Brown is treating Aubrey, a 6-year-old German shorthaired pointer, with radiation for a soft tissue sarcoma lodged in one of her upper hind legs.

Without radiation — the intensity-modulated radiation therapy specifically — options and outcomes can sometimes default to major surgeries and less certainty about future recurrences, Brown said.

“Radiation is nice because it just targets that site and it kills all those cancer cells that are left over, and it does a very good job doing it,” Brown said.

“This should provide very good long-term controls, and because she is young and healthy in every other way ... she has an excellent prognosis with this,”