Utah Veterinarian and Human Radiation Oncologist Create World’s First HDR Brachytherapy Center for Pets

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Salt Lake City–A veterinarian and a medical doctor in Utah have teamed up to offer a ground-breaking, highly successful form of radiation therapy for the treatment of cancers in dogs and cats. Known as High Dose Rate (HDR) brachytherapy, it delivers radiation by an agile, robotically controlled radioactive seed that delivers a pinpointed burst of radiation directly into the tumor. It was originally designed to target certain forms of human cancer. Human radiation oncologists have used it with tremendous success on cancers of the prostate, breast, cervix, uterus, and in the head and neck, to mention a few.

Dr. Clayton Watkins, owner of VetMed Consultants in Holladay (6221 Highland Drive/Holladay, UT 84121, www.vetmedutah.com) and human radiation oncologist and brachytherapy specialist Dr. John K. Hayes, owner of Companion Curietherapy (6221 Highland Drive/Holladay, UT 84121), have combined their human and animal experience of 60 years to offer state-of-the-art radiation treatment to animals. The pair recently received state approval for a radiation facility where animals can be treated on-site at their Holladay location. Notably, this is the first dedicated radiation facility for pets in Utah, and, the first facility in the world dedicated to HDR brachytherapy for pets.
The prefix “brachy” is from Greek meaning “from a short distance.” Studies too numerous to count have demonstrated its efficacy in treating human cancers. Brachytherapy is applied inside the tumor through tiny hollow catheters that are placed by Dr. Watkins via needles to the anesthetized animal.

Dr. Watkins and referring veterinarians are seeing life enhancing and life-extending results for their animal patients. Doctors Watkins and Hayes have been using brachytherapy and, when needed, external beam radiation, to fight cancer in pets for three years. Many of their patients are still going strong 30 months after treatment. Until recently, veterinary cancer treatment in Utah was limited to surgery and chemotherapy. Utah pets needing radiation had to be taken by their owners out of state for radiation cancer care, at great time and expense.

Veterinary radiation oncologists for decades have used external radiation to treat cancers in pets, often using human hospital radiation equipment in the evenings and on weekends. The collaboration between doctors Watkins and Hayes is setting a new precedent in taking brachytherapy care into veterinary medicine in a bold fashion. Dr. Hayes says that the smaller the patient, the more need there is to consider using radiation in the form of brachytherapy, because it is far superior in confining the area treated to the tumor while sparing normal tissues.

“Our clients love the results we can get for their family pet. Brachytherapy is not painful and does not result in systemic side effects,” says Dr. Watkins. “Compared to other types of radiation, brachytherapy provides a higher dose of radiation and less exposure to normal tissues, it’s less expensive, and is it better shaped to the tumor we are targeting.”

When a pet comes in to VetMed Consultants for radiation treatment, both doctors are present for each procedure. Also in attendance is board certified medical physicist Joshua Bryant, MSDABR, founding partner of Mountain States Medical Physics. Bryant ensures the safe use of the radiation and he assists with the technical planning for the use of radiation. The pets receiving treatment are also attended to before, during and after radiation by three highly trained veterinary technicians. Dr. Hayes adds, “Our patients are getting technologically advanced care, equal in every way to that which we give in humans, and that translates into some amazing results.” This level of technology comes at a cost, but the team is intent on keeping the cost as low as possible.

Pet insurance companies often do cover the expense, making it even more accessible for pet owners. Dr. Watkins says that the most common type of tumor he sees in pets is nasal tumors. At VetMed, they treat nasal tumors as well as oral tumors, paw and limb tumors, mast cell tumors and urethra and bladder/prostate tumors. For both, this has been a very meaningful collaboration, and not their primary endeavor. Dr. Watkins’ primary focus is on non-invasive and minimally invasive interventional endoscopy, and Dr. Hayes’ primary focus is human radiation oncology.
Dr. Watkins and Dr. Hayes began working together after one of Dr. Hayes’ neighbors requested treatment of a pet dog. The resulting treatment, though complicated because it involved taking an anesthetized pet from veterinary hospital to imaging center to Dr. Hayes’ clinic and then back to vet hospital, was very successful. “We’ve seen outstanding results using brachytherapy to target and defeat tumors in humans. We are happy to see the same good results happening for pets,” Dr. Hayes says. Now at the VetMed Clinic in Holiday they have all the necessary equipment to do the entire procedure there, making it much faster and safer for the patient.

Dr. Watkins attended BYU then earned his doctorate of Veterinary Medicine Degree from Colorado State University in 1988. In 1990, He was an early adopter of using ultrasound and endoscopy in veterinary medicine. In addition to brachytherapy, Dr. Watkins is applying cutting-edge interventional technology in the treatment of such diseases as nasal and bladder tumors, urinary stones, intestinal polyps, and upper airway disorders.

Dr. Hayes attended BYU, then the University of Utah for medical school and specialty training in radiation oncology, and has been performing brachytherapy procedures for his human patients since 1988. Dr. Hayes was the pioneering radiation oncologist for HDR brachytherapy in Utah and is one of the world’s leading experts in brachytherapy.