



# Mysterious greyhound disease yielding to KSU investigations

By Kay Garrett

Though first seen at southern race tracks, Alabama rot is no respecter of state lines, afflicting racing greyhounds from Wisconsin to Florida.

Severe skin lesions and kidney failure characterize the mystery illness with no known cause or cure. It's severe enough that owners most often euthanize a sick dog partly out of frustration at the stubborn disease and partly out of fear to protect other dogs.

Veterinary researchers at Kansas State University, given a rare opportunity "to pull out all the stops" to study a small animal disease, now say with confidence that dogs can recover from a bout of Alabama rot and perhaps live to race again.

They've also discovered that Alabama rot closely mimics a human disease of adolescents, hemolytic uremic syndrome, for which no acceptable experimental animal model is available. The syndrome in humans is sometimes the result of severe bouts of food poisoning and during the last few months it has become a significant concern.

In the past year, two dozen sick greyhounds from all over the nation have been referred to the K-State veterinary clinics for observation and care. Several dogs that were seen soon enough have been returned to their owners, said Brad Fenwick, the principal investigator, an associate professor of pathology and microbiology.

The research team received \$25,000 from the American Greyhound Council and more than \$100,000 from the Kansas Racing Commission to study Alabama rot. The grant has paid for transporting dogs to Manhattan, Kan., and for all aspects of their medical care, at an average cost of \$3,500 per animal.

"The funding has enabled us to take a clinical approach similar to the one human medicine takes in the face of an unknown disease, AIDS for example. That is, treat the symptoms with every tool available," he said. "We've taken cultures and biopsies, run all the sophisticated diagnostic lab tests and tried various treatment regimes.

"Consequently, though we don't know its causative agent yet, we know a great deal more about this illness now. It appears to be an infectious but not a contagious disease. So, if one dog in a kennel is sick, the owner or trainer doesn't need to worry about other dogs contracting the illness," Fenwick said.

"Antibiotics and anti-inflammatory drugs have no recognizable effect, but the good news is the dogs respond to supportive nursing care," he said.

That care would include kidney dialysis until the kidneys return to normal functioning, and there is good reason to believe they will," he said. The better the nursing care, the better the animal's chances are of going home well."

He continued: 'Some agent, we don't know exactly what yet, causes the cell lining of the blood vessels to die, but the resulting lesions appear to be reversible. And we're beginning to have some suspicions about the possible agent that's killing the cells.'

Co-investigators with Fenwick are veterinary clinician Laine Cowan and research pathologist Donna Hertzky. The team is collaborating with a pediatric kidney specialist at the University of Kansas Medical Center who routinely handles children with hemolytic uremic syndrome.

"We've felt very honored to have received support for this study because there's been very little research funding for diseases of small animals. Now it looks like we may also contribute to a better understanding of a human disease as a result," he said.

Fenwick's research also is supported by the Kansas Agricultural Experiment Station.

**November 1, 1993**

**[http://www.k-state.edu/media/webzine/VET\\_RESEARCH/greyhoundillness.html](http://www.k-state.edu/media/webzine/VET_RESEARCH/greyhoundillness.html)**