

STILLWATER, Okla.—A team of Oklahoma State University (OSU) veterinarians, virologists and pathologists at the Oklahoma Animal Disease Diagnostic Laboratory (OADDL) recently published a paper in the *Journal of Clinical Microbiology* on their findings from a Canine parvovirus (CPV) study. Led by Dr. Sanjay Kapil, the group is the first to describe the CPV type 2c variant in the United States.

“We were quite fortunate to discover this variant,” explains Kapil. “It has been known for six years in Italy but nobody paid attention to it here until we found it last year.”

Shortly after Kapil joined the OSU Center for Veterinary Health Sciences, he received a case at the OADDL. The adult dog had been vaccinated multiple times and still became sick with Parvovirus.

“This was very unusual and we were totally surprised that it was CPV type 2c, which had not been found in the U.S. until then,” says Kapil. “What was so interesting was that after we described this disease, we ended up with samples from other locations here in the U.S.”

A patent has been filed on the characteristics of the U.S. CPV-2c. The team reports that 500 samples were submitted from locations in south California to south Florida. The published paper has been presented at national level meetings and internationally in Italy and Melbourne, Australia. However, their work is not done.

“The team work was most important. Sometimes we received ten dead puppies a day. We are working with several veterinarians and are receiving samples from cases with a history of vaccine failure,” continues Kapil. “Diagnostic laboratories need to be involved to identify CPV-2c. The disease now exists in all countries except Australia because of its geographical isolation.”

According to Kapil, the disease presentation is different in that normally parvovirus does not affect adult dogs only puppies. However, since publishing their findings, the OADDL has received samples from adult dogs in Minnesota.

“Veterinarians are confused because the in office diagnostic tests come up negative,” explains Kapil. “Clinically it looks like parvovirus so they send it to us. The OADDL tests it and it is parvovirus. Now world-wide (except for Australia), this particular variant can attack the heart and intestines.”

He goes on to say that the mortality can be quite heavy. One breeder claims to have lost 600 puppies in one night. Without diagnostic confirmation, it is not known if the cause was simply this virus or if other factors were involved.

“We will continue to study CPV-2c. Through collaborations with others we will search for more effective vaccines,” he promises.

Of 80 cases tested by the OADDL, 26 were from Oklahoma puppies/dogs. Of those 26, 15 tested positive for CPV-2c. For more information on the Oklahoma State University Center for Veterinary Health Sciences, visit <http://www.cvhs.okstate.edu> .