Clinical Drug Trials in Ferrets with Adrenal Disease

Support needed from ferret community reported by Pat Stauffer

A research study to investigate the efficacy of several new drugs in the treatment of adrenal gland disease is being conducted by Dr. Charles Weiss of the Potomac Animal Hospital in Potomac, Md. The drugs being tested are used to inhibit androgens and estrogens in humans with breast or prostate cancers. Although these medications are quite expensive, they may be affordable for ferret owners since ferrets would require small dosages. Even though the long-term efficacy and safety of the drugs for use in the ferret have not been determined, the early clinical trials show promising results.

Dr. Weiss is well known to the ferret community for his previous clinical studies on adrenal tumors and insulinoma, both the largest studies of these diseases in the ferret. These previous studies have contributed greatly to the advancement of the medical and surgical treatment of ferrets. According to Dr. Weiss, adrenal gland tumors are one of the most common conditions seen in the domestic ferret, with an incidence of up to 25%. These tumors are unique in the ferret because they produce an excess of estrogens and androgens and not cortisol, as do adrenal gland disorders in dogs and people. The excess of estrogens and androgens causes the debilitating clinical signs of the disease.

The drugs being used in the clinical trial do not shrink adrenal tumors but do alleviate the symptoms of the disease. According to Dr. Weiss, ferrets with benign adrenal tumors that are not surgical candidates will benefit most from the new treatments. Ferrets with malignant adrenal tumors are still at risk of the tumors spreading and affecting other organs even though the classic adrenal disease symptoms have abated. For some ferrets with long-standing adrenal symptoms and severe clinical signs, the medications may be able to improve their health to the point where they are again surgical candidates.

In the past, the primary treatment for adrenal gland tumors has been surgery. Because ferrets commonly have other illnesses such as insulinoma and cardiomyopathy, however, not all ferrets with adrenal gland tumors are surgical candidates, and some clients and ferret shelters cannot afford surgery. Even after surgery, adrenal gland tumors reoccur in about 10–15% of ferrets. Medical treatment has been attempted with Mitotane with fair to poor results and with common, potentially significant side effects. Mitotane can also induce life-threatening hypoglycemic attacks in ferrets with concurrent insulinoma (approximately 25% of ferrets with adrenal tumors have concurrent insulinoma). As a result of the limitations of the surgical and current medical treatments for adrenal gland tumors, there are hundreds or even thousands of beloved pet ferrets across the country that suffer with not many options for relief.

The valuable information gleaned from this new study may lead to a protocol and dosage for the medical treatment of adrenal gland tumors in the ferret. Ferrets admitted to the drug study are currently provided treatment at a dramatically reduced cost. There is no charge for blood work and medication. Unfortunately, resources are very limited, although some assistance is being given by the University of Tennessee School of Veterinary Medicine, TAP Pharmaceuticals, and Marshall’s Ferrets. The majority of the cost of the study is being supported by the Potomac Animal Hospital and Dr. Weiss personally. Because there are so many ferrets available for the study, more funding is critical to enable this important project to continue.

Any contributions made to the study will directly benefit the pet and shelter ferrets under treatment through the purchase of drugs and blood tests. Contributions to this important research and questions may be directed to Dr. Weiss at the address below.

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[Editor’s Note: Montgomery County, Md., residents can read about Dr. Weiss and his research in the January 27, 1999, issue of the Potomac Gazette. AFA member Pat Stauffer of Philadelphia, Pa., and Nancy Stephens of Delaware, another client, were quoted in the article. TPF’s Joey (not an adrenal patient) owned by Freddie Ann Hoffman of Potomac was photographed with Dr. Weiss. Non-ferret owners might think Joey is looking at Dr. Weiss lovingly. I think he’s eyeing the doc’s stethoscope!]