

Ferret Adrenal Disease

Ferret adrenal disease is a disease of ferrets caused by over production of sex hormones in the adrenal gland. The typical clinical signs for this disease generally are seen in ferrets 3 years of age or older. Affected ferrets demonstrate hair loss that can be seen evenly distributed over the body (bilateral symmetrical alopecia). Often the hair loss starts at the tail giving the ferret a “rat tail” appearance and moves forward over time. Often there is previous hair loss with spontaneous re-growth. Some ferrets with this disease are itchy. Some sprites (spayed females) will develop a swollen vulva much like an intact female (gill) would do when she is in heat. Some male ferrets (gibbs and hobbs) may show increased aggression and mounting behavior. Other males may exhibit difficulty in urination (dysuria) because of an enlarged prostate.

The diagnosis for ferret adrenal disease is based upon clinical signs, ultrasound detection of an enlarged adrenal gland, blood steroid hormone assay, and/or exploratory surgery revealing an adrenal mass with histologic confirmation of the disease.

The cause of this disease is not totally understood: however, certain predisposing elements may be involved. These include early neutering (most ferrets in the pet trade are neutered at 4-6 weeks of age); a genetic predisposition; or prolonged photoperiods. The breeding season for a ferret is during the months when day light is the longest (spring and summer). During this time, the sex hormones are at their highest. During months of short day light periods (fall and winter), the sex hormones are at their lowest. This can be seen as the normal pelting cycle in the ferret when they are the heaviest and have the thickest fur coat during the winter months and are the lightest and have the thinnest fur coat during the summer. When ferrets are kept as indoor pets and exposed to prolonged photoperiods (light periods), then it is as if they are constantly in the breeding season. This causes prolonged high levels of sex hormones produced by the adrenal glands that enlarge which are responsible for the disease.

The treatment of choice for ferret adrenal disease is surgical removal of the enlarged adrenal mass or masses. Most cases involve only one adrenal gland mass; however, 16% of the case involve both glands. In such cases, when both glands are completely removed, the ferret will most likely require hormone supplementation.

Medical treatment for ferret adrenal disease is limited to treatment of clinical signs in nonsurgical candidates. There is no evidence that medical treatment will inhibit progression of the growth of the adrenal mass or diminish the risk of the adrenal tumor to spread to other organs. Medical treatment is designed to reduce the amount of hormonal influence on the adrenal glands in an effort to slow the progression of the disease. Medical treatment is also used in the treatment of male ferrets with enlarged prostate glands associated with adrenal disease. Surgical removal of the adrenal mass, the source of the hormones causing the prostatic enlargement, is the only effective method in the treatment of the potentially life-threatening prostatic disease associated with ferret adrenal disease.