Iris hyper pigmentation (*melanosis*) and melanoma in the cat

Occasionally animals will develop different areas of pigment on their iris as they age. Some of these pigment changes are completely benign and do not pose a problem, but occasionally these pigment changes indicate the presence of a melanoma.

Melanomas in cats tend to be malignant tumors that spread inside the eye and to other areas of the body quite rapidly and are therefore treated aggressively.

The problem with iris pigment in cats is that there is no precise method to determine malignancy by only visual inspection. We know that typically iris melanomas tend to be raised and tend to increase in size, but without a cell sample or tissue biopsy we cannot make a definitive diagnosis. As one might imagine, taking a biopsy of the iris is difficult without risking significant hemorrhage within the eye. A cell sample, collected while “vacuuming” over the pigmented area of iris with a fine needle, can be successful in providing a diagnosis, however this procedure is not without risks to the eye.
Close monitoring of the pigment changes inside the eye by repeat photography and / or detailed drawings, repeat clinical examination, as well as examination by the owner at home is recommended in most early cases. If we see increases in size or see the pigmented areas changing in other ways, we may recommend surgery.

Surgery for iris melanomas in cats is aggressive. Early tumors may be treated locally with laser surgery; with the aim of shrinking the tumor and / or slowing it's growth. Complete surgical cure of iris melanomas in the cat is rare. For more advanced tumors, we recommend removal of the affected eye as soon as possible after the pigmented areas becomes suspect of a melanoma. The hope is that we identify the mass as a melanoma before the tumor has had a chance to spread to other areas of the body. This is one of the extremely few situations where we will recommend the removal of an eye that is still visual and is not overtly painful because the risk of spread of these aggressive tumors is so great.

There is no one good answer to the management of iris melanomas in cats, but close monitoring of the color change and repeated examinations by a veterinary ophthalmologist can provide the earliest treatment for a potentially life-threatening condition.

Dr. Franck Ollivier, DMV, Ph.D, Dipl. AVO and ECVO