Uveitis in Cats – Causes, Symptoms and Treatment

What is uveitis?

Uveitis is an inflammation of the uvea, the pigmented layer that lies between the inner retina and the outer fibrous layer composed of the sclera and cornea. It is one of the most common eye disorders in cats and can be potentially very serious.

The disease is classified according to the layer(s) involved.

- Choroiditis or posterior uveitis – Inflammation of the choroid
- Iritis – Inflammation of the iris
- Cyclitis – Inflammation of the ciliary body
- Anterior uveitis – Inflammation of the ciliary body and the iris
- Panuveitis – Inflammation of all the layers of the uvea

Causes:

There are many causes of uveitis, such as trauma, infection (bacterial, viral or fungal) and cancer. In many cases, an underlying cause can not be established, this is known as idiopathic.

Common causes of uveitis in cats include:

Immune-mediated:

- Immune-mediated thrombocytopenia

Uveitis at a glance

About: Uveitis is an inflammation of the uvea, which is the middle layer of the eye.

Causes: There are a number of causes including immune-mediated, diabetes, cancer, trauma, infectious and high blood pressure.

Symptoms: Cloudy or red appearance to the eye(s), abnormal pupil size, sensitivity to light, change in pupil shape.

Treatment: Find and address the underlying cause and anti-inflammatory medications and in some cases, atropine to dilate the pupils which may relieve discomfort.
• Immune-mediated vasculitis
• Immune-mediated hemolytic anemia

Systemic:
• Diabetes
• High blood pressure

Cancer:
• Lymphoma
• Melanoma
  • Eye tumours, the most common being diffuse iris melanoma and lymphoma.

Infectious:
• Bartonella henslæ (cat scratch disease)
• Feline Herpesvirus
• Feline Infectious Peritonitis (FIP)
• Feline Immunodeficiency Virus (FIV)
• Feline Leukemia Virus (FeLV)
• Feline herpes virus
• Toxoplasmosis
• Cryptococcus
• Blastomycosis
• Coccidiosis
• Candidiasis
• Histoplasmosis

Other:
• Blunt or penetrating injuries
• Lens-induced anterior uveitis is caused when the lens capsule breaks open leaking fluid into surrounding tissues, which causes an inflammatory response. Other causes include hyper-mature cataracts and lens luxation.
• Idiopathic (no known cause)

Symptoms:

Uveitis may occur in one eye (unilateral) or both eyes (bilateral) and it may be acute (sudden onset) or chronic (slow and progressive). Systemic causes of uveitis tend to occur in both eyes, whereas ocular disorders are more likely to affect just one eye. The most common symptom of uveitis is a colour change to the eye(s), which may be cloudy or red. It is an extremely painful condition and your cat may squint and paw at his eye. Other symptoms include:

• Sometimes red spots may be seen in the eye(s).
• The pupil may be small and unevenly shaped.
• Protrusion of the third eyelid.
• Redness of the third eyelid.
Abnormal pupil shape.
Sensitivity to light (photophobia).
Watery discharge.
Inflammation can cause the eye to become softer (hypotonic).

Note the reddened eye in the photo of Ella. Her uveitis was caused by immune-mediated hemolytic anemia of unknown origin. She made a full recovery. Click on the image above to see full size or the link below to see more photos of Ella’s uveitis. Image courtesy of Kirsten

**Diagnosis:**

Your veterinarian will perform a complete physical examination of your cat, including a thorough examination of the eyes to look for possible trauma. He will obtain a medical history from you including any other symptoms you may have noticed or recent illness.

If there is suspicion of a systemic disease he may wish to perform further tests, some of which may include:

- **Complete blood count.**
- **Biochemical profile.**
- Specific tests for infection and systemic diseases (FeLV, FIV, toxoplasmosis etc).
- Blood pressure test to check for hypertension.
- Thoracic X-rays to check for fungal diseases or tumours.
- Ultrasound of the eye if an injury is suspected.
- Ultrasound to look for fluid in the abdomen (if FIP is suspected).
- Fluorescein staining to evaluate for corneal ulcers.
- Tonometry to check the intraocular pressure of the eye. Uveitis usually results in lower intraocular pressure, however, with chronic cases, cats can often develop secondary glaucoma.
- Examination of the eye with an ophthalmoscope, a small handheld device which enables your veterinarian to examine the inside of the eye.
- Handheld slit-lamp examination looks at the front of the eye under magnification.

Unfortunately, while your veterinarian can diagnose uveitis reasonably easily, finding the underlying cause is not always possible with between 60-75% of cases being idiopathic (unknown cause).
Treatment:

Treatment of uveitis is aimed at treating the underlying cause, if it is known, reducing inflammation, relieving discomfort and preventing further damage to the eyes. Left untreated, uveitis can result in blindness due to glaucoma, cataracts, dislocation of the lens (lens subluxation) and detachment of the retina.

In some cases, your veterinarian may refer you to an ophthalmologist to manage your cat’s uveitis.

Treatment for uveitis may include the following:

- **Anti-inflammatory therapy.** Corticosteroids may also be administered systemically, subconjunctivally (under the conjunctiva) and topically.
- **Topical atropine ointment** if necessary to keep the pupils dilated which relieves pain and stops the inflamed iris sticking to the pupil, which causes further damage to the eye.
- **Antibiotics** to treat bacterial and protozoal infections.
- **Diabetes** should be brought under control, this usually involves a change in diet and/or insulin injections.
- **Viral infections** are usually managed with a combination of anti-viral medications (where available) and supportive care while your cat fights the disease.
- **Eye removal (enucleation)** to treat eye tumours.
- **Steroids** to treat immune-mediated disorders.

Follow-up care will be necessary to monitor progress. Unfortunately, uveitis is a disease which frequently recurs and may require lifelong treatment.