



Corneal Ulceration

Diagnostic Plan

History
Physical examination
Ocular examination
Fluorescein stain
Culture
Cytologic examination

Therapeutic Plan

Antibacterial ointments and solutions
Drugs that dilate the pupil
Surgery
Drugs to lessen the risk of pigment formation in the cornea

Nutritional Plan

Nutrition based on individual patient evaluation including body condition and other organ system involvement or disease

Corneal Ulceration

Your pet has a corneal ulcer. The cornea is the clear front part of the eye. Corneal ulcers are painful defects that result from many causes. Treatment for corneal ulcers is based on the cause and severity of the ulcer. This client education sheet will help you learn more about corneal ulcers and will review your veterinarian's instructions for your pet's care at home. Instruction for follow-up care with the veterinary health care team will be reviewed as well.

What You Should Know About Corneal Ulceration

The cornea is richly supplied with nerves, but normally contains no blood vessels. It consists mostly of protein, so it is susceptible to chemicals that dissolve or pass through protein. The cornea is very thin (less than 1/20 of an inch thick). Many disease processes can destroy one or all of the thin layers that make up the cornea, forming painful indentations called ulcers. Some ulcers worsen with time. They penetrate deeper into the cornea and spread across its surface. The eye may rupture with this type of ulcer.

Dogs have a higher incidence of corneal ulcers than do cats. Dog breeds with prominent eyes – such as Pekingese, pugs and Boston terriers – are most commonly affected.

Causes

Many destructive processes can cause a loss of the layers that form the cornea. Corneal ulcers can be caused by: infections of the eye with viruses, bacteria and fungi; trauma from chemicals (acids and alkalis); and foreign objects (cat claws, sticks, BB pellet). Hair or skin (eyelids and facial folds) that rubs against the corneal surface can also destroy corneal layers.

Diagnosis

An eye examination by your veterinarian will disclose the presence of corneal ulceration. This examination may also uncover the cause. A dye called fluorescein can be applied to the cornea to determine the extent of the ulcer. When a

bacterial infection is suspected, a specimen from the cornea can be collected by your veterinarian and incubated to determine the bacterial type and the bacteria's sensitivity to various antibiotics.

Treatment and Home Care

Removing the source of irritation may mean removing a foreign object from the eye, flushing chemicals from the eye or performing surgery to correct an eyelid that curves inward. Superficial ulcers often respond to antibiotics and medications to relieve pain. These preparations are formulated as drops and ointments that are usually placed directly on the cornea.

More serious ulcers often require surgery to remove unattached layers of the cornea, to remove pus from within the eyeball and to provide a protective barrier to allow the cornea to heal. Many veterinarians will cover the ulcer with another part of the eye (the conjunctiva or the third eyelid) to promote healing. Solutions containing antibiotics and pain-reducing medications are also used with severe ulcers.

Home care for pets with corneal ulcers should include providing access to a dark part of the house because bright light is irritating. Antibiotics and pain-reducing medications should be administered according to your veterinarian's instructions. A neck collar may be used to prevent pets from rubbing and pawing their eyes. Activity should be confined to leash walks for dogs, and cats should be confined indoors until healing is complete.

Nutritional Plan

After your pet's recovery from a corneal ulcer is complete, your veterinarian may suggest a dietary change based on your pet's age and body condition and on the presence or absence of disease in other organs and body systems. Optimal nutrition provides for a pet's needs based on age and activity level, but more importantly reduces the health risks associated with feeding excess sodium, phosphorus, calcium, protein and calories. Foods that avoid these harmful excesses and provide proper nutrition for each life stage include the Hill's® Science Diet® brand of pet foods.

Transitioning Food

Unless recommended otherwise by your veterinarian, gradually introduce any new food over a seven-day period. Mix the new food with your pet's former food, gradually increasing its proportion until only the new food is fed.

If your pet is one of the few that doesn't readily accept a new food, try warming the canned food to body temperature, hand feeding for the first few days, or mixing the dry food with warm water (wait ten minutes before serving). Feed only the recommended food. Be patient but firm with your pet. This is important because the success or failure of treatment depends to a large degree on strict adherence to the new food.

Presented as an educational service by



Home Care Instructions

Client's Name: _____

Patient's Name: _____

Medication(s): _____

Nutritional Recommendation: _____

Follow-Up Appointment: _____

(Hospital Stamp Area Above)

REGULAR VISITS WILL HELP OUR VETERINARY HEALTH CARE TEAM PROVIDE FOR YOUR PET'S BEST INTEREST.