

Feline URI Treatment - SAMPLE

General Disease Information

Agents: Multiple bacterial and viral pathogens, acting both sequentially and synergistically, are associated with Feline Upper Respiratory Infections (URI).

Common viral pathogens include:

- Feline Herpesvirus (FVH-1)
- Feline Calicivirus (FCV)

Common bacterial pathogens include:

- Bordetella bronchiseptica
- Mycoplasma spp.
- Chlamydia felis (C. felis)

Clinical signs

- Ocular and nasal discharge
- Sneezing
- Squinting
- Inappetence
- Fever

FCV is relatively likely to be associated with oral ulceration or limping and can be a major cause of outbreaks. FHV-1 tends to be more widespread and more likely to cause ocular issues. *Mycoplasma* and *C. felis* are more commonly associated with conjunctivitis without other signs. However, clinical signs overlap amongst all of the pathogens.

Diagnosis

Diagnosis is based on clinical signs. Identifying the causative agent is generally unnecessary since agents are treated similarly. Diagnostic testing is indicated when there is increased disease incidence and/or severity (i.e., an outbreak) or a failure to respond to treatment.

Prevention

Avoid crowing, reduce stress, reduce length of stay, provide adequate ventilation, and use proper biosecurity measures (including sanitation & disinfection and PPE).

Studies have shown that length of stay is a significant risk factor for the development of feline URI. Wherever possible, healthy, behaviorally sound cats should be fast-tracked through the shelter to avoid developing URI while in the shelter's care.

Humane housing is essential to reducing stress and URI; this includes examples such as the use of doublecompartment enclosures with a hide box and housing cats in low-traffic areas where they are not exposed to dogs or the sound of barking.

Evidence also supports that moving cats within the shelter causes stress and increases URI recrudescence. Limiting movement by getting healthy cats into adoption housing quickly after arrival can reduce URI in the population.



Treatment

All cats

- Offer canned foods and ensure the patient is eating.
- Evaluate environmental stressors.
- Make necessary husbandry adjustments, include prioritizing getting affected cats out of the shelter environment (e.g., adoption with disclosure, foster care).
- Monitor and document status until resolution.

Mild – clear ocular or nasal discharge, infrequent sneezing, mild lethargy.

- No antibiotics.
- Monitor the severity of signs with a monitoring sheet.
- If signs persist beyond a few days or worsen, start medications for moderate URI and add to vet checklist for an exam.

<u>Moderate</u> – dehydration, mucopurulent ocular or nasal discharge, coughing, nasal congestion, reduced appetite, or fever.

- Initiate Doxycycline 10 mg/kg PO SID for 7-10 days.¹
- If moderate ocular discharge, add topical eye drops or ointment.
- Administer 30 ml-60 ml/kg SQ fluids daily.
- If signs do not improve in 5 days, recheck with DVM.
- If inappetence worsens, recheck sooner with DVM.

<u>Severe</u> – Not eating, drooling, severe oral ulcers, very dehydrated, severe discharge, worsening 24 hours or longer after starting treatment above.

- Cerenia 1 mg/kg SQ can help with appetite, including nausea caused by other medications. A less effective alternative is Mirtazapine at 1.875 mg-3.75 mg PO per cat once.
- Administer 30-60 ml/kg SQ fluids daily.
- If oral ulcers present, pain medication should be given.
 - E.g., Buprenorphine at 0.12 mg/kg IM daily.
- Daily exams to monitor progress, administer additional treatments per veterinarian.
- Change to reserve antibiotic *if not improving* with initial course of Doxycycline.
 - Azithromycin 10 mg/kg PO SID x 5 days or Clavamox 12.5 mg/kg PO BID is recommended as the second line choice.
- Diagnostic testing (culture and sensitivity) may be indicated for unusual numbers of cases or severity of disease.
 - o Diagnostic testing can also help target antibiotic choices.

<u>Chronic/recurrent non-responsive URI</u> – This warrants potential further diagnostics or consideration of underlying conditions. For example, an oropharyngeal polyp, retroviral infection, or dental disease can contribute to non-responsive URI.

Documentation

Diagnosis of URI and treatment should be documented in the shelters' software system.

¹ If tablet form is used, follow with liquid in order to avoid esophageal stricture. If compounded form is used, ensure proper storage and use within effective shelf life as indicated by compounding pharmacy.



Housing During Treatment

Baseline housing for cats with URI is a humane, enriched enclosure within a designated isolation ward separating sick cats from other healthy cats. Isolation housing is essential for cats entering the shelter with URI, especially when signs are severe or if the cat is from a high-risk environment, such as a hoarding scenario.

In some shelters, cats that develop mild URI during their shelter stay can be safely and more effectively treated in their current enclosure and benefit from not being moved. This approach requires a risk assessment, as well as staff training and signage to prevent the spread of URI from affected to healthy cats that may share the ward.

Cleaning Protocol

Spot cleaning is preferred for routine feline sanitation and during URI treatment in order to minimize stress. When disinfection is needed, a standard protocol using accelerated hydrogen peroxide (e.g., Rescue[™]) or another disinfectant with efficacy against unenveloped viruses is sufficient.

Outcome Decisions

The vast majority of feline URI cases are treatable and do not warrant euthanasia. However, any cat that develops severe pneumonia or respiratory distress should be euthanized if advanced care cannot be provided.

Cats that have completed the appropriate treatment course and have no clinical signs of feline URI may be medically cleared to move to adoption housing. Ideally, recovered cats would be housed in single-cat housing or communal cat rooms with only other URI-recovered cats unless part of a litter.

Adoption Counseling

Feline URI cases can be adopted without a medical memo if they have recovered.

Cats under treatment for mild to moderate URI may be made available for adoption; moving to the home environment can reduce the duration and severity of the disease and reduce shelter-related stress. Some cases of feline URI are more severe, or cats may remain chronically symptomatic.

Medical staff should add a medical disclosure to the record for active cases. This disclosure should be reviewed with the adopter to highlight the risk that their new cat may develop feline URI clinical signs again in the future or may transmit a feline URI to their resident cats.

Implications for Population Management

Increased incidence of adult cats developing URI in the shelter can be a sign the shelter is exceeding its capacity for care. In rare instances, it can also be a sign of a more virulent infectious agent. A risk assessment including population-level assessment and diagnostic testing should be performed.

Resources

Lappin et al. Antimicrobial Use Guidelines for Treatment of Respiratory Tract Disease in Dogs and Cats: Antimicrobial Guidelines Working Group of the International Society for Companion Animal Infectious Diseases. J Vet Intern Med.2017; 31: 279-294.

Staff Training

Feline Upper Respiratory Disease Basics

This sample protocol was created by ASPCA® Shelter Medicine Services. Contact <u>sheltermedicine@aspca.org</u> for further information.

