

Feline Upper Respiratory Infection (URI) Discussion

Treating feline URI can be frustrating. Here are some of the factors to take into account when deciding whether, what, and how much treatment to give a shelter cat.

While we want to do all we can to speed recovery from URI, it is important to recognize that treatment itself is associated with risks and costs, especially in a shelter. Over-use of antibiotics compromises normal gastrointestinal flora, leaving cats vulnerable to the many GI pathogens lurking in shelters. Antibiotics also cause undesirable side effects, and the risk of selecting for antibiotic resistant organisms is a constant concern. With any treatment that involves handling and manipulation of cats, the risk of spreading disease is increased, and treatment itself can be quite stressful for cats and caretakers alike. Overtreatment should therefore be avoided. While it can be tempting to try a variety of anecdotal treatments or give antibiotics just to be doing something about this frustrating disease, treatment should ideally be limited to therapies for which there is a reasonably strong clinical justification.

It should also be noted that prevention is the greatest option of all! To leave more about preventing feline URI please see [Dr. Hurley's lecture on this topic](#).

Goal of Treatment

The discussion below reflects an assumption that cats are being treated for URI with the intention of continuing treatment until the cat recovers and is placed for adoption. In some shelters, this is not the case. When feline overpopulation within the shelter is a problem, shelters may hold cats with URI only for the legally required period. If a cat is going to be euthanized at the end of a stray holding period, then treatment should be directed at making the cat as comfortable as possible. It is rarely indicated (or practical) to treat with antibiotics in such cases.

Assessing Treatment Candidates

When selecting cats to place on treatment, consider both the overall status of your shelter and the ability to deliver appropriate medical care. If the shelter is not able to find homes for every healthy, behaviorally sound cat, consider carefully the adoptability of cats that are started on

treatment for URI. It does not make sense to invest large amounts of time and energy, or to subject cats to a long course of treatment, if they are unlikely to be adopted after it is all over or if another adoptable cat will have to be euthanized to make space to move the recovered cat out of isolation. It can also be a good idea to test cats for FeLV/FIV prior to initiating treatment for URI.

The availability of medical care also determines which cats should be considered for treatment. For instance, if there is inadequate staff (including veterinary supervision) to deliver antibiotics or fluid/nutritional support, it is not fair to keep cats requiring such treatment in the shelter. In such a case, in-house treatment candidates should be limited to those needing only minimal support and isolation. If being able to treat sicker cats is a priority, staffing (paid or volunteer) should be in place before initiating such a program. At minimum, a URI treatment program must have a veterinarian available for consultation (including providing a treatment protocol) and a skilled technician on staff to implement any treatment plan provided by the veterinarian.

Treatment rationale

The two most common causes of feline URI, accounting for 80-90% of cases, are feline herpes virus and feline calicivirus. In shelters, evidence is mounting that feline herpesvirus is far more common than calicivirus as a cause for endemic URI. Less commonly, bacterial species may be the primary cause, including chlamydia, mycoplasma, and bordetella. Cats with primary viral URI may also suffer from a variety of secondary gram positive and gram negative bacterial infections ^[1]. (Schulz 2006).

By definition, the signs of infection with any one of the possible agents of URI are similar. All can cause sneezing and ocular and nasal irritation and discharge, and definitive diagnosis is generally impractical in a shelter setting.

However, some signs are more common with one or another agent. For instance, limping and oral ulceration are more common with feline calicivirus infection, while ocular ulcers and pain are more often associated with feline herpes infection.

Initial treatment should be based on the most likely cause of the observed clinical signs, and this is the basis for the recommendations in this [sample treatment protocol](#). Note that this is only intended to be an example; the veterinarian's choice of specific antibiotics and supportive care may be slightly different, but the general idea is to have a consistent plan for treatment based on presentation, such that staff can become familiar with

medications, dosages and side effects, and the efficacy of treatment can be more readily assessed and modified if needed.

In general, blanket treatment with antibacterial agents is inappropriate when evidence of a bacterial infection is lacking, and may even be harmful. However, under some shelter conditions virtually all cats progress from clear nasal or ocular discharge and sneezing (category 1) to more severe signs suggesting possible bacterial involvement (categories 2-4). If this is the case, it may be better to pre-emptively treat all affected cats with appropriate antibiotics as soon as any clinical signs are noted rather than awaiting inevitable progression.

This is most often the case when treatment rooms are crowded, ventilation is poor, cats under treatment are highly stressed, or other husbandry problems are occurring. Blanket treatment with antibiotics should not be a long term alternative to identifying and addressing these problems. If most or all cats progress to requiring antibiotic treatment, diagnostic testing should be performed to determine whether an unusual pathogen is present. If primarily herpes or a mix of the common pathogens is detected, attention should be paid to improving the husbandry factors described above.

Reference:

1) Schulz, B. S., G. Wolf, et al. (2006). "Bacteriological and antibiotic sensitivity test results in 271 cats with respiratory tract infections." Vet Rec **158**(8): 269-270.