Behavioral Medications for Cats

Cats are considered perfect pets by many people because they’re relatively self-sufficient. If we provide a few basics—like a clean litter box, fresh water and access to nutritious food—they share our lives without demanding constant care. However, this same benefit can sometimes create problems when things go awry. When a cat develops a behavior problem, pet parents are often at a loss as to how to solve it.

As with dogs, many behavior problems in cats can be resolved with a change in management of your pet or your pet’s environment. For instance, litter box problems can often be dealt with by changing the presentation of the box, the litter or other factors associated with use of the box. However, sometimes cats develop behavior problems that pet parents can’t reduce or resolve. For instance, problems may develop between multiple cats in a household, or a cat might stop using her litter box because of a physical problem that’s no longer even bothering her, or a cat might groom herself excessively, to the point of pulling all her hair out.

When behavior problems like these develop in cats, help is available from qualified professional animal behavior experts, such as Certified Applied Animal Behaviorists (CAAB or ACAAB) or board-certified veterinary behaviorists (Dip ACVB). After reviewing the specifics of your cat’s behavior problem and all the factors that influence it, a behaviorist can design a successful behavior modification plan to resolve the problem. In some cases, a behavior problem can be treated most successfully with a combination of behavior modification and behavioral medication.

Is Medication Necessary?
You might be reluctant to give your cat behavioral medication and prefer to find a solution that focuses on behavior modification or a change in your cat’s environment. However, keep in mind that some problems can be resolved more quickly—and with less distress to both you and your cat—if medication is added to the treatment plan.

The most effective approach to treating a behavior problem in a cat is behavior modification. Behavior modification plans designed by knowledgeable, qualified professionals treat a problem behavior by:

- Changing the cat’s perception of a situation or thing
- Changing the consequences of the cat’s behavior
- Giving the cat an acceptable outlet for her natural behavior or an acceptable behavior to do instead of the problem behavior
- Using a combination of these solutions

Unfortunately, behavior modification can prove difficult in some situations. For example, natural cat behavior is sometimes at odds with a cat’s environment. Many modern households have multiple cats. But cats are solitary hunters, and although they sometimes get along, it’s also normal for them to avoid each other. Because living together isn’t natural for them, it’s sometimes necessary to help cats in a single household learn to accept each other. This can be accomplished through a kind of behavior modification procedure called desensitization and counterconditioning (DSCC). Sometimes, however, cats are so excited and upset by the sight and smell of each other that DSCC isn’t possible. In these cases, behavioral medication can reduce the cats’ reactivity to each other enough so that DSCC can be carried out successfully.
Can You Use Medication Instead of Behavior Modification?
Behavioral medication alone isn’t usually enough to resolve behavior problems. Medication serves to reduce the emotional part of a situation, but it doesn’t resolve the behavioral component. Once medication gets your cat’s emotional reactions under better control, behavior modification can be used to change her behavior. For instance, if your cat is afraid of another cat in your home, she might not use the litter box because of her fear. Medication can help your cat be less reactive to the other cat—but it won’t help her learn to use the litter box again.

Which Medicines Are Best for What?
For the most part, four types of behavioral medicines are used to treat behavior problems in cats. These medicines are benzodiazepines (BZs), monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants (TCAs) and selective serotonin reuptake inhibitors (SSRIs).

The following table shows different cat behavior problems that have been successfully treated with a combination of medicine and behavior modification:

<table>
<thead>
<tr>
<th>Behavior Problem</th>
<th>Medicine Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>General timidity</td>
<td>SSRI, TCA</td>
</tr>
<tr>
<td>Litter box problems caused by anxiety</td>
<td>BZ, TCA, SSRI</td>
</tr>
<tr>
<td>Urine marking</td>
<td>BZ, TCA, SSRI</td>
</tr>
<tr>
<td>Aggression</td>
<td>BZ, TCA, SSRI</td>
</tr>
<tr>
<td>Compulsive behavior, such as excessive grooming</td>
<td>SSRI, TCA</td>
</tr>
<tr>
<td>Cognitive dysfunction</td>
<td>MAOI</td>
</tr>
</tbody>
</table>

Medicines for Treating Sudden or Severe Fear, or Aggression
Just like antibiotics need to be taken for a while before they begin to fight bacteria, most behavioral medications for cats need to be taken daily for several weeks before they produce results. In situations where your cat is acting aggressive at the slightest sight or smell of another cat or has some other severe reaction to a fear of something else, a few weeks can be too long to wait. Benzodiazepines (BZs) can reduce your cat’s reactivity immediately. BZs produce results as soon as they’re taken, so they can treat fear or aggression within a few hours.

Some common BZs are diazepam (Valium®), alprazolam (Xanax®), chlordiazepoxide (Librium®), lorazepam (Ativan®) and clonazepam (Klonopin®). BZs work by increasing the activity of a chemical in the brain that interferes with activation of the fear networks.

Dose Effects
You can only know if a drug is working if you have an idea of what effects to expect. The following list offers expected reactions in cats to different doses of benzodiazepines:

- At low doses, BZs decrease the intensity of excessive behavior and reduce excitability.
- Moderate to high doses of BZs can reduce anxiety and increase playfulness, but they can also produce impaired movement and thinking, including disorientation. BZs affect some of the same parts of the cells in a cat’s brain as alcohol does in a human brain, and they produce similar effects. High doses can produce increased restlessness and anxiety, particularly when an animal is already stressed when given the medicine.
Side Effects
Benzodiazepines can increase appetite and sleeplessness. They can also interfere with learning and memory, so they aren’t good choices for long-term use with DSCC.

Health Issues
Benzodiazepines are metabolized in the liver and excreted through the kidneys of a cat, so if your veterinarian advises you to treat your cat with BZs, he should check your cat’s liver and kidney function with a simple blood test. If your cat has had problems with her kidneys or liver in the past, be sure to let your veterinarian know.

Medicines for Treating Ongoing Behavior Problems
Behavior problems that involve day-to-day household issues, such as problems between multiple cats within a household, or ongoing problems, such as excessive grooming, are best treated with medicines that are given long term, such as TCAs, MAOIs and SSRIs.

Tricyclic Antidepressants
Tricyclic antidepressants (TCAs) were first used to treat depression in people. They work primarily by increasing serotonin and norepinephrin—two neurotransmitters that are involved in regulation of emotional activity. They also affect other neurochemicals involved in emotional reactivity. The TCAs prescribed most for cats are amitriptyline (Elavil® or Tryptanol), clomipramine (Anafranil® or Clomicalm®), doxepin (Aponal®), imipramine (Antideprin or Deprenil), desipramine (Norpramin® or Pertofrane) and nortriptyline (Senoval). Every cat is unique behaviorally and physiologically, so while one TCA might not work well for your cat, another TCA could have excellent results.

Although TCAs were originally intended to treat depression in people, they can also reduce anxiety, manage compulsive behavior and help people with anger problems. They’ve been used successfully in cats to help treat compulsive behavior problems like excessive grooming, reduce reactivity to other cats in the household and treat anxiety problems.

Dosage Schedule
TCAs are prescribed for use every day. If the medicine isn’t taken every day, it won’t work to treat the behavior problem. TCAs are not usually effective the first day—or even the first few days—that they’re taken. Because at least some of their effectiveness comes from the changes they make to the brain, TCAs must be taken for at least two to three weeks before they produce results. Treatment should continue for at least two months before a decision is made regarding the success of the drug.

Health Issues
TCAs are metabolized in the liver and excreted through the kidneys of a cat, so if your veterinarian advises you to treat your cat’s behavior problem with a TCA, he should give your cat a simple blood test to make sure these organs are working well before beginning treatment. If your cat has had problems with her kidneys or liver, be sure to let your veterinarian know. It’s recommended that a recheck blood test be done every year (twice a year for older cats) to ensure that the medicine hasn’t damaged the liver or kidneys.

TCAs should not be used with MAOIs because the combination of these two types of drugs can increase serotonin to unhealthy levels.
Side Effects
TCAs can increase water retention, and water retention produces dry mouth. As a result, some cats might foam at the mouth, and they might also be extra thirsty. Because they're thirsty, they might drink extra water. Water retention can also lead to constipation and even diarrhea. All of these effects can lead to house-soiling problems. TCAs can also cause a sudden increase in heart rate.

Monoamine Oxidase Inhibitors
Monoamine oxidase inhibitors (MAOI) work on similar neurotransmitters as TCAs, but they work differently and with less selectivity, so they have a more general effect on the brain. Selegiline (Anipryl®) is an MAOI that seems to mostly affect the neurotransmitter dopamine. It's used to treat cognitive dysfunction in older cats, and studies indicate that it can slow aging of the brain.

Health Issues
Some MAOIs can have dangerous side effects when cheese is eaten. Selegiline doesn't fall into this category, but because some humans have reactions to cheese when taking it, pet parents should avoid giving their cat cheese when she's taking selegiline.

MAOIs should not be used with SSRIs because the combination of these two types of drugs can increase serotonin to unhealthy levels.

Selective Serotonin Reuptake Inhibitors
SSRIs affect the brain chemical called serotonin. Common SSRIs are fluoxetine (Reconcile® or Prozac®), paroxetine (Paxil®) and sertraline (Zoloft®).

SSRIs like fluoxetine and sertraline have been successfully used to treat a number of anxiety-related behavior problems, such as fearful avoidance of the litter box, fear of other cats in the household or aggression toward other cats. SSRIs are also useful in reducing compulsive behaviors, such as excessive grooming.

Health Issues
SSRIs are metabolized in the liver and excreted through the kidneys. Even if your veterinarian does a pretreatment blood test to check liver and kidney health, be sure to let him know of any medical problems your cat has or has had in the past. It's a good idea to have your cat's liver and kidneys rechecked each year if she's kept on an SSRI.

SSRIs shouldn't be used with MAOIs because the combination of these two types of drugs can increase serotonin to unhealthy levels.

Dosage Schedule
SSRIs need to be taken every day to be effective. If the medicine isn't taken every day, it won't work to treat the behavior problem. SSRIs are rarely effective the first day and, in fact, can increase anxiety in some cats before they begin to have therapeutic effects. Because SSRIs create changes in the brain, they must be taken for at least six weeks before they produce results. Treatment should continue for at least four months before a decision is made regarding the success of the drug.
Because SSRIs take a few weeks to take effect, some people also treat their cat with another medicine, such as a benzodiazepine, when they begin treatment with an SSRI.

**Serotonin (5-HT) Agonists**

Buspirone (BuSpar® or Bespar) is the only 5-HT agonist that’s used regularly in companion animal behavior treatment plans. It’s sometimes used in conjunction with SSRIs and TCAs when treatment begins, but it’s also sometimes used by itself.

**Dosage Schedule**

Like other medicines that act on serotonin, buspirone needs to be taken every day to be effective. If the medicine isn’t taken every day, it won’t work to treat the behavior problem. Buspirone usually takes about three weeks to produce therapeutic effects, although this period might be shortened if the medication is taken in addition to an SSRI.

**Giving Your Cat Her Medicine**

If you decide to use a behavioral medication to help your cat overcome a behavior problem, you might run into a challenge when you try to give her medicine. It can be difficult to get cats to swallow pills, and some cats get so upset by the pilling process that they start avoiding their pet parents altogether.

**Seek the Advice of an Experienced Professional**

This article is intended to help pet parents understand common behavioral medications used for cats. It is not intended as a guide to choosing behavior medications. If your cat suffers from fear, anxiety, compulsive behavior or any other behavior problem for which you’re considering behavioral medication, be sure to first consult a Certified Applied Animal Behaviorist (CAAB or ACAAB) or a board-certified veterinary behaviorist (Dip ACVB). These qualified animal behavior experts can evaluate your cat’s behavior problem and help you develop a treatment plan, give you advice on suitable medications, and work with your veterinarian to maximize the success of your cat’s treatment program.

© 2010 ASPCA. All Rights Reserved.