

Feline Inappropriate Elimination

Motivation

Every organism must eliminate. Thankfully, cats instinctively bury their waste and they are the only domestic mammal that does. However, some cats respond to medical, emotional or physical stress by changing their elimination habits. This may serve to lower stress or communicate social rank, sexual availability, territory or a personal statement. One theory suggests it is one way to signal cat traffic. Another, is that a cat's urine mark enhances his confidence.

The individual may be attracted or repulsed by a surface, scent or location. In multiple cat households one cat may force another cat away from the litterbox. In other cats, it may be displacement of another problem, or a statement of fear. The easiest component to correct is a medical motivation.

Medical Evaluation

This is one behavior problem that frequently has a medical cause. Have your veterinarian do a complete medical workup. This workup should include blood work for ruling out diabetes, kidney or adrenal disease, uterine infection and thyroid dysfunction. Diseases of the bladder include infection, stones, crystals, tumors or abdominal masses pressing on the bladder resulting in decreased control. A fecal analysis should rule out colitis, maldigestion, malabsorption, diarrhea or constipation. The physical exam should rule out physical problems like neurological tumor, trauma, infection, inflammation and age-related senility. All this should be done quickly since every day the problem persists increases the inappropriate surface and location habit.

There are some signs you can look for at home that suggest a medical problem. These include crying out when urinating, straining for an extended period, urinating on porcelain surfaces, and a pattern of frequent small eliminations in a variety of locations.

Observe for a relationship between stressful experiences (like visiting the veterinarian), and a reoccurrence of the problem. If a relationship is noted, obtain oral tranquilizers for use prior to predictably stressful situations.

Determining Which Cat Has the Problem in a Multiple Cat Household

Inappropriate elimination is most common in multiple cat households. The incidence increases from 25% in single-cat households, to nearly 100% in households with more than 10 cats.

If feces is the problem, confine one cat at a time to single out the culprit. Use a small room such as a bathroom or laundry room. Give a big meal, a comfy bed, and a more than one clean litterbox. (See section on confinement.) If the problem continues, it was not this cat.

If urine is the problem, it is slightly more difficult to identify the cat, because the odor lingers, and the spot is not visible. Some pet stores sell an ultraviolet lamp (about \$30) that can be used to show urine stains in a darkened room. If you suspect one cat but can't confirm it, you can give the cat a small amount of fluorescein¹, which you can obtain from your veterinarian. Use a fluorescein impregnated (eye test) strip, and dissolve in several mls of sterile saline solution. This can be given to the cat orally each day. If this is the cat that is eliminating out of the box, the ultraviolet lamp should show a glowing green urine spot on the carpeting. It is not always accurate.

Spraying vs. Urinating

This is an important distinction. *Spraying* is usually found on vertical surfaces (e.g. walls) and suggests a territorial marking. Spraying near glass doors or windows suggests a response to strange cats seen from that location. If this seems part of the problem, cover the glass temporarily during retraining.

¹ Your veterinarian may supply these. Use the dye from 3 strips, either in a gelatin capsule, in their food, or dissolve the material and give the liquid orally. The dye will be excreted for about 1-2 days.

Urinating is always found on horizontal surfaces (e.g. floors) and is more suggestive of an emotional or litterbox related problem. Some cats will territorially mark on horizontal surfaces. If so, marking is likely to occur near windows, doors and imposing furniture, and at a repeat spot.

Urine Vs. Feces

Inappropriate urination occurs twice as often as defecation in cats. If one occurs and not the other, it may suggest a litter or location preference. If the deposit is close but just outside the box it may be litterbox aversion. The litterbox was initially attractive, but at the last minute aversive.

Prognosis for Problem Solution

Some cases are easy, others are never resolved. Here is a list of variables:

- 1) Genetic Predisposition
- 2) Duration
- 3) Number of cats in the household
- 4) Frequency of soiling
- 5) Number of areas soiled
- 6) Number of different types of surfaces soiled
- 7) Number of cats participating in soiling
- 8) Practicality of allowing limited outdoor access
- 9) Ability to discern one or more modifiable causes
- 10) Ability to rearrange the structural household environment (move chairs, close doors, etc.)
- 11) Strength of owner bond to this cat
- 12) Willingness of the owner to pay for a complete medical workup
- 13) Amount of time the owner is willing to devote to solution
- 14) Willingness to accept and execute use of psychoactive medications

Treatment for all cases of *Inappropriate Elimination*: regardless of cause

- 1) Get a thorough medical work-up. The goal is to be able to say with confidence that there is no medical component to the case.
- 2) Increase frequency of cleaning of all boxes. Don't use strong-smelling cleaning solvents.
- 3) If reducing the number of cats is part of the plan, try to find them a good home, especially aggressive or problem cats. They will likely be happier and nicer as an "only cat" in a new household.
- 4) Confine the suspect cat to a single room for *litterbox retraining*.
- 5) Feed meals twice a day. Food is only available for 5 minutes, no dry left out. The food is a treat that will later be used to lure the cat into the room during litterbox retraining.
- 6) After each meal, gently put the cat into the litter box and pet and praise. Give food treats for successful elimination in box. If the cat leaves the box without using it, don't interfere, just stop praising and ignore the cat.
- 7) Spatially separate the cat's bed, water and feeding spot as far as possible from the litterboxes.
- 8) During confinement, offer multiple boxes with different types of litter.
- 9) Keep track of what litter and or style of box is used, and plan on using that combination in the future.
- 10) Soak any carpeted urine spots in enzymatic odor neutralizer, then have the affected carpets cleaned
- 11) After at least 5 repetitions of successful litterbox use, begin to let the cat out for 10 minutes, then gradually increasing periods of freedom. Do this just before the next meal, so that you have an incentive to get the cat to reenter the confinement room.

Additional treatments for a spraying problem

If the problem is limited to urine sprayed on vertical surfaces, the prognosis is good based on two new therapies implemented as of 1997.

The first new approach to spraying is use of feline facial pheromone. The new product is called "Feliway". This synthetic chemical mimics the scent found in the gland near the lips of cats. The Feliway is misted daily on each spot the cat has marked (not on the cat!). The product is now commercially available, produced by Abbot Labs, and available through veterinarians from most veterinary supply companies. (Cost = about \$40/bottle). A similar replacement strategy is to provide a scratching post near the affected site. Cats also mark with their claws and the scent from glands in their paws, so this might satisfy the need to mark territory.

The second new therapy is the behavioral drug Clomipramine. The protocol is to use it initially at 0.5 mg/kg SID until the problem is corrected. Then taper until the drug can be stopped after the new habit pattern is in place. The goal is to change the cat's "thought process" to reduce the need to mark.

Additional treatments for a non-spraying problem

- 1) If the existing box is one year or older, discard and replace the box. The urine may seep into the plastic over time and the smell may be enough to repel a sensitive cat.
- 2) After you have identified preferred litter and boxes, provide multiple boxes as the cat is reintroduced to the entire house. Temporarily, try providing boxes in pairs, each with a different litter. Provide at least one more box than the number of cats in the household. Introduce each new box by gently placing the cat in the litterbox, praising and holding a paw so it strokes the litter to demonstrate the surface is appropriate for digging. Don't force anything.
- 3) Try larger and taller boxes in the mix. It may be necessary to cut a "passageway" into the box.
- 4) Don't place any boxes near appliances that might suddenly make a noise, or otherwise be scary.
- 5) Make sure at least one of the boxes has the very fine "clumping" litter, since cats seem to prefer it.
- 6) Temporarily feed the cat at locations previously used for urine or fecal marking. Cats loathe to eliminate near their feeding area, so this encourages them to look for new locations.
- 7) When there is no further "accidents", return to feeding the cat in its normal location, but leave an empty food bowl at the spot for at least an additional week.
- 8) Another way to discourage returning the same spot is to cover it with plastic, such as a carpet runner, or deposit potpourri in the area, since people don't usually mind the smell, but cats seem to dislike it.

Urinating on a specific person's belongings

If urinating on one person's items (identified by scent) it probably represents an emotional response on the part of the cat. The tricky part is that it can be a positive or negative message. Most likely, the cat is exhibiting separation anxiety, or a status conflict. Try to have everyone else ignore the cat, and the targeted person feed and be the only source of attention for 2 weeks. During this period, shut the cat out of the rooms previously used, and make special effort to pick up clothes or other previous targets. This type of urination is one indication for anti-anxiety medication.

Punishment and Praise

What if you catch the cat in the act? If just beginning to assume the position (prior to elimination), try to gently pick up and relocate to the box. Praise correct use if it occurs in the box. If she's in process or just finishing, use a water pistol, shake can, or thrown object (the negative consequence came out of thin air). Don't punish the cat, since it increases anxiety, and reduces the chances she will allow you to observe her do it again. Part of the strategy is copious praise and treats when you see the cat use the box correctly.

If all else fails consider making your pet an indoor/outdoor cat, even if declawed. If allowing any unsupervised outdoor time, give the cat an identification chip implant and put an ID tag on the collar.

Feliway™ Behavior Product Protocol

Note: This product has two distinct indications, A and B below

A: For Rx: Feline Facial Marking Pheromone Effect

This product is indicated for cases of Feline Inappropriate Urination where the clinician feels the cause of the problem is urine marking. Evidence of this is spraying urine on vertical surfaces in the face of a normal UA, serology and physical exam. Urination on horizontal surfaces may be marking, and hence Feliway is indicated IF the urination occurs on peoples' objects, on power locations such as near doors and windows or elevated objects, and if the spots are used repeatedly.

This product is not indicated for cases where the inappropriate elimination is due to a medical cause such as in

B: For use in hospitalized or boarded cats: Calming Effect

This use is intended to cause a calming effect on stressed cats in our care.

Signs of Feline Stress:

- 1) Hiding
- 2) Frozen Posture
- 3) Aggression (due to fear)
- 4) Anorexia (lack of appetite)

In this case, the signs of stress should be noted in the record. Feliway is used by applying one quick spray in each corner of the cage. It should be repeated at least once daily, and after each cage cleaning. It takes 30 minutes to evaluate the cat's response. Head rubbing sprayed areas is good.

OTHER steps to be taken with stressed cats:

- 1) If not aggressive, apply one drop of "Rescue Remedy" herbal supplement every 2 hours until the cat is relaxed
- 2) Spend some extra time with non-aggressive cats, talking and petting. This is also helpful at feeding time to induce a mildly stressed cat to eat.
- 3) Consider moving non-infectious cats away from dogs into the cat lodge.
- 4) Place a towel over the front of the cage.
- 5) Put a brown paper bag inside the cage where the cat can hide.
- 6) When practical, place a cardboard box inside that the cat can hide in or jump on top of.
- 7) If very stressed, call the Dr. to prescribe anti-anxiety medication such as Acepromazine

Signs the cat is becoming less stressed are:

- 1) Eating
- 2) Sleeping
- 3) Self Grooming
- 4) Exploring the kennel
- 5) Approaching the front of the kennel, seeking attention