# applied behavior QUESTION & ANSWER OF THE MONTH

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## Overgrooming in Cats

Is overgrooming a recognized behavioral disorder in cats? We have a patient that licks and bites at its flanks, sometimes coupled with periods of muscle twitching and vocalization. Our diagnostic work indicates no dermatologic or other medical cause.

The behavior that you describe characterizes what is variously called feline hyperesthesia syndrome, rolling skin disease, neuritis, twitchy cat disease, psychogenic alopecia, and atypical neurodermatitis. The syndrome can include such behaviors as biting or licking at the tail, flank, and anal or lumbar areas; skin rippling and muscle spasms or twitching (usually dorsally); vocalizing; running; jumping; hallucinations; and self-directed aggression.<sup>1</sup>

Not all cats self-mutilate, but those that do can exhibit a range of behaviors from barbering to creating skin lesions from the excessive licking, biting, chewing, and even hair plucking (trichotillomania). Regardless of the degree of behavioral change, owners report that it is difficult to distract the cat from the behavior. The sequence can vary. Cats might twitch and then focus on a part of the body to lick or chew; or they might groom, start to twitch, and then exhibit other behaviors such as running then turning around and hissing.

#### **Environmental or Mental?**

Environmental and social stressors have been associated with these disorders and range from obvious causes (such as dermatologic conditions including atopy, food allergy, or fleas; intercat aggression; the addition or loss of another cat; the addition



or loss of a human with attendant changes in attention) to indiscernible exogenous cues. Cats may also perceive truly endogenous cues—that is, their behavior can be the consequence of altered neurochemistry/neuro-transmission resulting in anxiety.

### Competing with the Urge

Treatment for this and other obsessive-compulsive disorders\* should include an increase in activities that compete with the repetitive behaviors. If the cat likes to chase and play, owners are encouraged to interact more with their cat and actively play with it. Cats can also be trained to come, sit, jump, or display other "tricks" in return for food or other rewards. Owners can also hide dry food and special food treats in the environment so that the cat has to actively seek them out. Hiding places can vary from day to day, keeping the cat stimulated to search and find.

These cats should not be punished: Most owners are unable to catch the cat in the act every single time. If they are unable to apply punishment consistently and correctly, anxiety will increase. If anxiety is truly the underlying cause of these behaviors, punishment will exacerbate the condition. In addition, animals occasionally perform behaviors to attract attention. Unwanted behaviors should not be "rewarded" with attention.

In all cases except attention-seeking behaviors the owner can attempt to interrupt the behavior with an unusual sound, ask the cat to perform another behavior (e.g., come, sit), and then reward the pet for doing so (food treat or attention). Environmental situations that are "stressors" and potential contributors to the problem (intercat aggression, lack of indoor activities/stimulation,

continues

<sup>\*</sup> In veterinary medicine the term stereotypy has been used traditionally to define behaviors that are repetitive, constant, and appear to serve no obvious purpose. Stereotypies and obsessive-compulsive disorders are currently used interchangeably in the behavioral literature by some authors. Considerable discussion occurs when the question "can animals obsess?" is raised. It appears that animals perceive concern and anxiety; thus, it is possible that they can obsess.3

# applied behavior CONTINUED

changes in attention to the cat) need to be addressed. Medication to decrease anxiety is usually prescribed for at least 12 weeks because the medication must be fully effective before it can be decided whether it is beneficial. Some patients require a higher dose; others require more frequent administration.

### **Pharmacologic Options**

Treating humans for obsessive-compulsive disorders involves trying a drug for at least 6 months before changing the drug or adding another one. Clomipramine, a tricyclic antidepressant, has been traditionally used in humans. In the United States, clomipramine is labeled for use in dogs to treat separation anxiety; in Canada and Australia, it is also labeled to treat obsessivecompulsive disorders in dogs. In the past 15 or more years, selective serotonin-reuptake inhibitors (SSRIs), such as paroxetine, sertraline, fluoxetine, and fluvoxamine, have demonstrated efficacy in obsessive-compulsive disorders in people. In contrast, clomipramine, although efficacious in humans, is often associated with more substantial adverse events, particularly anticholinergic effects.4

Although many of these drugs have been used in cats and dogs to treat anxiety-related behavioral problems, they are not labeled for use in animals, and very few data are available on their efficacy for treatment of obsessive-compulsive disorders in cats (or dogs). Many other drugs have been used to treat obsessive-compulsive disorders in cats.3 Some examples include amitriptyline (Elavil—Zeneca), hydrocodone (Hycodan— Endo Labs), diazepam (Valium—Roche), and clorazepate (Tranxene—Abbott). In a recent study, clomipramine was effective in controlling signs of anxiety-related and obsessive-compulsive disorders in 10 of 11 cats and was well-tolerated.<sup>5</sup> The average maintenance dosage was 0.3 mg/kg once daily. Four cats became lethargic at higher doses. Potential side effects include vomiting, constipation, decreased appetite/anorexia,

dry mouth, tachycardia, arrhythmia, and sedation. Side effects associated with SSRIs include sedation, decreased appetite, anorexia, vomiting, and diarrhea.

Routine CBC and biochemistry panels must be done before prescribing any psychotropic drug. Therapy may be necessary for months and perhaps years. Blood tests are repeated yearly in young patients and twice yearly in older patients.

Each patient presenting with a tentative obsessive-compulsive disorder needs to be fully evaluated medically and behaviorally to determine the best drug option for that patient and to address all other contributing factors. Although the question notes that the diagnostic workup indicated "no dermatologic or other medical cause," it is important to conduct a very complete dermatologic workup, ideally by a board-certified dermatologist, as most cats referred for selfinduced alopecia have underlying dermatologic problems, with atopy and flea or food allergies being most prevalent.6 In some instances, internal causes such as bladder calculi (anecdotal reports of ventral abdominal alopecia) or tumors (pancreas or thymus) can be associated with dermatologic lesions.

See Aids & Resources, back page, for references, further reading, and contacts.



#### WHAT TO DO

- Do *not* punish animal.
- Try to interrupt behavior:
  - Make an unusual sound.
  - Ask cat to perform another behavior; reward it for doing so.
- Address endogenous/exogenous contributors (intercat aggression, lack of activity/stimulation).
- Provide antianxiety medication for ≥12 weeks.



### DIFFERENTIAL DIAGNOSES<sup>6</sup>

- Dermatologic conditions
- Underlying metabolic disorders
- Estrus (rare)
- Attention-seeking behavior (rare)



### DOSAGES FOR SELECTED PSYCHOTROPIC DRUGS IN CATS\*

Generic Name	Proprietary Name (Manufacturer)	Dose/Regimen
Clomipramine	Anafranil (Novartis)	0.3-0.5 mg/kg PO q 24 hr
	Clomicalm (Novartis)	
Fluoxetine	Prozac (Dista)	0.5-1.0 mg/kg PO q 24 hr
Paroxetine	Paxil (SmithKline Beecham)	0.5 mg/kg PO q 24 hr

<sup>\*</sup>These drugs are not labeled for use in cats. Clomipramine is labeled for use in treatment of spraying cats in Australia.