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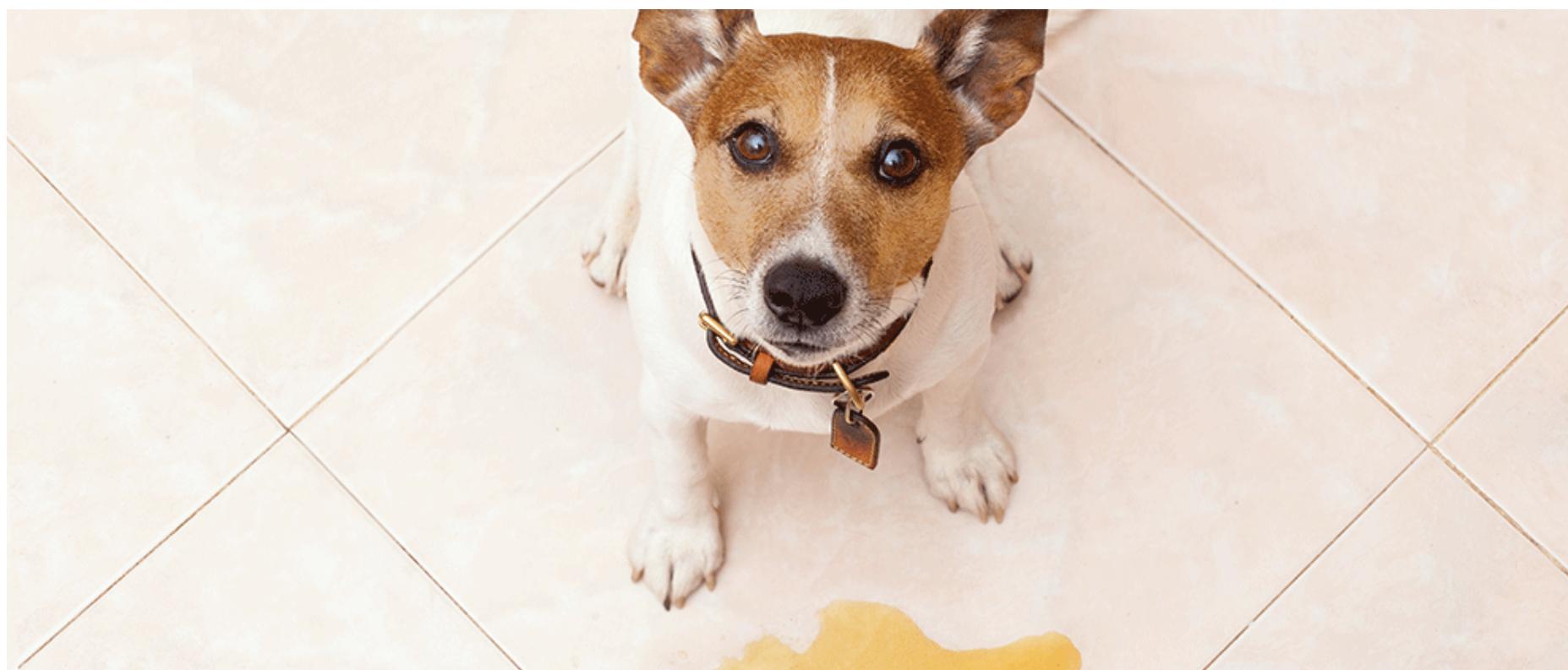
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Canine House Soiling: Back to Basics



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LOCATION, LOCATION, LOCATION

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interrupt by clapping or whistling, and then immediately bringing the pet to the desired location.

Despite the general ease of house training, house soiling is a common behavior problem, reported in approximately 20% of pet dogs.¹ House soiling degrades the human–animal bond and is a common reason for pet relinquishment.^{1–3}

Screening patients for behavioral issues at every visit is recommended to identify problems early and institute treatment before the human–animal bond is strained or broken. When house soiling is identified, the first step in developing an effective treatment plan is to determine the underlying cause or motivation for soiling because several medical and behavioral differentials exist.

PREVENTION: HOUSE TRAINING

With appropriate preventive counseling, most puppy and new dog owners are able to house train their dogs within 1 to 2 months of adoption.⁴ There are 2 important house training goals:

- Make elimination in the desired location easy.
- Prevent mistakes.

These goals can be achieved with close owner supervision, scheduled frequent elimination opportunities, and confinement (**Box 1**) when the dog cannot be supervised. Although some mistakes will happen even with careful management, frequent mistakes should be avoided because the dog or puppy may develop learned preferences for indoor elimination sites.

BOX 1. Confinement Options for House Training

- Confine the dog or puppy to a crate or pen
- Tether it to a specific area of the house
- Tether it to a family member (also known as umbilical cord training)

Introduction of confinement should be done gradually and should be paired with positive experiences to prevent separation or confinement distress.

Initially, the new dog or puppy should be taken on supervised trips to the chosen elimination site on the following schedule:

Every 2 to 3 hours

- Immediately upon waking and before confinement
- Within 10 to 15 minutes of meals and playtime

Use of positive reinforcement—for example, giving a treat immediately after elimination in the desired location—can further strengthen preferences for elimination at the desired location.

If the dog or puppy is caught in the act of eliminating indoors, the owner can attempt to interrupt by clapping or whistling, and then immediately bringing the pet to the desired location. Counsel clients to avoid verbal or physical punishment because it can cause fear, anxiety, and aggression and does not teach the dog or puppy where to eliminate. Any soiled indoor sites should be thoroughly treated with an odor-eliminating or enzymatic cleaner as residual odor may encourage resoiling. Once the dog has not soiled indoors for at least 8 weeks, the frequency of scheduled elimination trips and stringency of supervision can be gradually reduced.

DIAGNOSTIC DIFFERENTIALS

Medical conditions should be the top differentials for soiling in puppies refractory to house training, cases with acute onset, or soiling in adult and geriatric dogs that were previously house trained. Conditions that can contribute to house soiling include anything that increases the urgency or frequency of elimination, causes pain on elimination, or affects mobility or voluntary control of elimination. Cognitive dysfunction syndrome is a common condition affecting senior dogs that may result in loss of house training via progressive decline in cognitive functioning.^{5,6}

Lack of house training is a common behavioral cause of house soiling.^{5,6} Soiling occurs for the purpose of relieving pressure on the bladder or bowels. Learned preferences for one or more indoor elimination sites may develop as elimination is a self-reinforcing behavior.

Urine marking is elimination for the purpose of communication.^{5,6} When urine marking, dogs typically deposit small amounts of urine on vertical surfaces. This behavior is most common in intact male dogs^{5,6} but can be observed in intact females and neutered males and females. Urine marking may also be a sign of anxiety, triggered by stressful situations or territorial threats.

Excitement or submissive urination occurs during interactions with other animals,

including humans. In this context, a rapidly wagging tail or signs of appeasement, such as lip licking, lowered head, and caudally deflected ears, accompany urination. Excitement or submissive urination is most common in puppies⁶ and young female dogs.^{5,7}

Fear and anxiety disorders that may result in house soiling include separation anxiety, noise aversions, and fear of the outdoors.⁷ Dogs with separation anxiety may soil during even brief owner absences, whereas dogs with noise aversion may do so during loud noise events, such as thunderstorms or fireworks. Dogs with noise aversion or fear of the outdoors may refuse to go outdoors to eliminate, or their emotional state may prevent or interrupt complete elimination when outdoors. Treatment of the primary condition can help to decrease the frequency or resolve the house soiling.

HISTORY

A thorough history helps to differentiate these conditions. Specific questions to focus on include the following:

- **Who is soiling?** In multidog/multianimal households, avoid making assumptions. If the soiling occurs only in the owner's absence, using a video camera to monitor the soiled area can definitively determine the culprit and ensure the correct patient receives treatment.
- **What is it: urine, feces, or both?** Domestic dogs rarely mark with feces, so the presence of stool suggests a medical condition, lack of house training, or a fear or anxiety disorder.
- **Where is the dog soiling?** A consistent location or surface pattern suggests lack of house training,⁸ while in the author's experience an inconsistent pattern of soiling throughout the home may indicate a response to fear or anxiety.
- **When does the soiling occur, and are there identifiable triggers? Is the owner present, absent, or both?** Soiling only in the absence of the owner, even for brief periods, suggests separation anxiety, while soiling during owner interactions suggests excitement or submissive urination.^{5,6} Determining the frequency of house soiling will also establish the baseline with which to measure treatment success.
- **How does the timing of soiling relate to opportunities to eliminate and meal times?** Learned preferences for indoor sites may develop when dogs are not allowed frequent access to an outdoor elimination site and if elimination

opportunities are not offered after meals, play, and sleeping.

- **How does the dog eliminate?** Signs of discomfort, such as straining or difficulty posturing to eliminate, suggest medical conditions, whereas signs of fear or anxiety while the dog is outdoors suggest an emotional condition.

DIAGNOSTICS

A veterinarian should evaluate all dogs presenting with house soiling issues. The minimum database for dogs younger than 5 years includes a physical examination, urinalysis via cystocentesis, and imaging of the lower urinary tract. Dogs aged 5 years and older should also have a complete blood count and chemistry profile. Intestinal parasite screening and a rectal examination are recommended if the dog is defecating indoors. Additional diagnostics, such as water quantitation and a urine cortisol/creatinine ratio, may be needed depending on the patient's signalment and clinical signs.

TREATMENT

Lack of House Training

Lack of house training can be addressed with the same methods used in prevention. Additionally, access to the dog's preferred indoor elimination site should be restricted. If this is not possible, the owner can attempt to change the function of the site by placing bedding or food and water bowls in the area. Dogs with long histories of house soiling may require several months of careful management to become completely house trained. Complete house training is not established until no house soiling episodes have occurred for 8 weeks or more.

Urine Making

Castration reduces the frequency of urine marking in 50% to 80% of male dogs, regardless of age at time of castration.⁹ If the castration status of a male dog with marking behavior is undetermined, abdominal ultrasound may help to identify or rule out cryptorchidism. Environmental management strategies for urine marking involve restricting the dog's access to marked sites, cleaning soiled areas with odor-elimination products, and identifying triggers for marking so they may be eliminated or reduced. Triggers for marking in dogs may include the smell, sight, or sound of other dogs or other arousing stimuli, such as mail or package delivery. Medications, such as tricyclic

antidepressants or selective serotonin reuptake inhibitors, can help to reduce the marking dog's emotional arousal and decrease urine marking when combined with environmental management.

Excitement and Submissive Urination

Treatment strategies for excitement and submissive urination include environmental management, behavior modification, and, in some cases, medical therapy.

Environmental management requires identification of triggers for urination so they can be eliminated or reduced. Triggers may include the following:

- Approach of familiar or unfamiliar people
- Standing, reaching, or leaning over the dog
- Petting
- Speaking in a loud, excited, or harsh tone

Clients should be counseled to avoid these types of interactions; call the puppy or dog over to them, rather than approaching; and keep greetings calm. The dog or puppy should also be given an opportunity to eliminate outdoors immediately before the arrival of visitors and should be confined away from visitors who cannot follow the calm greeting routine.

Behavior modification strategies focus on teaching the puppy or dog greeting behaviors that are incompatible with urination, such as lying down or retrieving a toy. Medications that reduce emotional arousal (tricyclic antidepressants or selective serotonin reuptake inhibitors) or increase urethral sphincter tone (phenylpropanolamine) may aid treatment of excitement or submissive urination.

Suggested Client Resources on House Training

- Horwitz DF, Ciribassi J, Dale S, eds: *Decoding Your Dog: The Ultimate Experts Explain Common Dog Behaviors and Reveal How to Prevent or Change Unwanted Ones*. New York: Houghton Mifflin Harcourt; 2014.
- Martin KM, Martin D. *Puppy Start Right: Foundation Training for the Companion Dog*. Waltham, MA: Karen Pryor Clickertraining; 2011.
- The Ultimate Puppy Toolkit: ultimatepuppy.com

SUMMARY

House soiling is a common behavior problem in dogs that affects the human–animal bond. A veterinarian should evaluate all house-soiling dogs because several medical conditions can cause elimination issues. Lack of house training is a common behavioral cause of house soiling, and prognosis for improvement is excellent with the use of careful environmental management.

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