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Blanket and flank sucking in Doberman Pinschers

Alice A. Moon-Fanelli, PhD; Nicholas H. Dodman, BVMS, DACVB; Nicole Cottam, MS

Objective—To evaluate blanket and flank sucking and any association with pica in Doberman Pinschers.

Design—Survey and case-control study.

Animals—153 Doberman Pinschers (77 dogs with blanket or flank sucking and 76 unaffected dogs).

Procedures—Owners of Doberman Pinschers with blanket sucking, flank sucking, or both were surveyed regarding the age of onset, triggers, frequency, duration, interruptability, and associated medical and behavioral consequences. A putative association of blanket sucking and flank sucking with pica was examined by comparison of affected dogs with unaffected dogs.

Results—Apart from the difference in the object of oral activity between blanket and flank suckers, age of onset was the only variable that differed between dogs with the 2 conditions. Dogs with blanket or flank sucking had a higher prevalence of pica than the unaffected population.

Conclusions and Clinical Relevance—Blanket and flank sucking are apparently related conditions that can occur with sufficient intensity to cause medical sequelae. These nonnutritive suckling behaviors share similarities with other canine compulsive disorders and are associated with pica. Veterinarians should advise owners that flank and blanket sucking are abnormal, potentially harmful behaviors in dogs. Treatment should be considered for severely affected dogs or when flank or blanket sucking is associated with medical problems. (*J Am Vet Med Assoc* 2007;231:907–912)

Blanket sucking and flank sucking have long been recognized as abnormal behaviors that are almost exclusive to Doberman Pinschers.[1] When engaged in blanket sucking, affected dogs mouth fabrics and suck on them, sometimes accompanied by kneading movements with the forepaws. Although blanket sucking causes fabric to become wet and damaged, it has not been associated with any effects detrimental to affected dogs. Flank sucking is characterized by repetitive mouthing and sucking of the flank region, resulting in effects ranging from a rough, dampened coat to alopecia to raw, open skin lesions.[2]

Both behaviors may most accurately be described as forms of nonnutritive suckling. Like flank sucking, blanket sucking usually occurs immediately before the dog falls asleep, a pattern reported to resemble suckling in neonates.[1] Nonnutritive suckling behavior has also been considered an anxiety-related comfort behavior, perhaps originating out of conflict as a displacement behavior.[3] At this point, there is no research to substantiate whether these behaviors more accurately resemble nursing or comfort behaviors. Flank sucking and blanket sucking in dogs have been deemed forms of canine compulsive disorder.[4-8] Little is known about blanket sucking and flank sucking except their general features and the observation that they primarily affect Doberman Pinschers.[5,7] In 1 report,[1] the author describes blanket sucking as a variation of flank sucking. Pica, the persistent consumption of nonnutritive substances,[9] is an abnormal ingestive behavior that affects Doberman Pinschers, which we hypothesized may be comorbid with blanket and flank sucking. Although pica can be a sequela of various medical conditions, it may also be an oral compulsive behavior.[8,10]

The purpose of the study reported here was to evaluate blanket sucking and flank sucking in Doberman Pinschers and evaluate any association with pica.

Materials and Methods

Study participants—Participants for the study were solicited at 2 local dog shows and via advertisement through the Pilgrim Doberman Pinscher Club and the Doberman Pinscher Club of America. Additional participants were acquired in response to an article about the study published in the Purina Pro Club newsletter. Convenience sampling methods were used to increase the number of dogs included in the study. Dogs were assigned to either the affected or unaffected group on the basis of the presence or absence of blanket sucking, flank sucking, or both, as described by owners. Dogs were specifically excluded from the unaffected group if they had any compulsive behavior such as acral lick dermatitis. Because flank sucking and blanket sucking are distinct behaviors easily identified by owners and not easily confused with medical conditions, a veterinary diagnosis was not considered necessary for identification of affected individuals. However, all dogs

From the Department of Clinical Sciences, Cummings School of Veterinary Medicine, Tufts University, North Grafton, MA 01536. Address correspondence to Dr. Moon-Fanelli.

had been examined by their local veterinarian within a year of participating in the study. No medical conditions associated with the onset or continuation of blanket sucking, flank sucking, or pica were reported.

Survey—Owners who expressed a willingness to participate in the study were sent a survey designed to solicit information regarding the appearance of the behavior, age of onset, frequency, duration of bouts, eliciting triggers, injuries resulting from the behavior, flank preference, presence of pica, and to what extent the behavior interfered with the dog's normal functioning and relationship with the owners. Owners were asked to provide their best estimate for age of onset, duration, and frequency of bouts on the basis of their history of living with the dog. When owners reported that they denied their dog access to sucking materials, their estimates for frequency and duration were based on behavior prior to denying access. When responses were unclear, the owners were contacted directly for clarification. Owners were also asked to provide additional medical and behavioral information that might be relevant to assigning the dogs to the affected or unaffected group. Some owners did not answer all of the survey questions. For comparative purposes regarding the presence of pica, age of onset of pica, and neuter status of affected dogs, behavioral data were collected on 76 dogs that were not affected with blanket or flank sucking.

Statistical analysis—All analyses were performed with standard software.[a] The Mann-Whitney *U* test was used to analyze continuous and ordinal data. The χ^2 test was used to detect differences in variables with 2 categories of nominal data/column or row. The Fisher exact test was used when there were more than 2 categories of nominal data/column or row. Values of $P < 0.05$ were considered significant.

Results

Seventy-seven dogs affected with blanket sucking, flank sucking, or both were included in the study. Fifty-five (71%) dogs had only blanket sucking, 14 (18%) had only flank sucking, and 8 (10%) had both. Fourteen (18%) dogs also had a veterinary diagnosis of acral lick dermatitis in addition to either blanket or flank sucking.

Sex and neuter status—There was no difference in sex distribution between affected dogs and unaffected dogs ($P = 0.674$) or between dogs with flank sucking versus blanket sucking ($P = 0.281$). There was no difference in neuter status between affected dogs and unaffected dogs ($P = 0.993$) or between dogs with flank sucking versus blanket sucking ($P = 0.783$). Thirty seven of 63 (59%) dogs with blanket sucking and 10 of 22 (45%) dogs with flank sucking were female. Thirty eight of 63 (60%) dogs with blanket sucking and 14 of 22 (64%) dogs with flank sucking were neutered. Forty-five of 76 (59%) unaffected dogs were female, and 48 of 74 (65%) unaffected dogs were neutered.

Age of onset—A significant difference in age of onset between blanket and flank suckers was identified (**Table 1**). Age of onset was known or confidently estimated for 73% (46/63) of dogs with blanket sucking and 73% (16/22) of dogs with flank sucking. Median age of onset for blanket sucking was 4.8 months and for flank sucking was 8.5 months.

A significant difference in age of onset for blanket versus flank sucking also was found when ages were grouped into categories (Table 1). Onset of flank sucking for a large percentage of dogs occurred in 2 clusters from 3 to 6 months of age (6/19 dogs) and ≥ 12 months of age (9/19). One dog began flank sucking between 6 and 9 months of age and another began flank sucking between 9 and 12 months of age. Only 2 dogs began flank sucking before 3 months of age.

For dogs that had both behaviors, a significant difference was found in age of onset of the 2 behaviors, with flank sucking arising at a later age. Six of 6 dogs with both behaviors began flank sucking at > 12 months of age, whereas only 2 of 7 dogs started blanket sucking when they were ≥ 12 months of age ($P = 0.021$). Comparison of age of onset by use of categoric age data and age data reported in years for the 8 dogs that had both behaviors revealed that for 4 dogs the onset of blanket sucking preceded flank sucking. In 1 dog, the onset of blanket and flank sucking occurred concurrently. Only 1 owner of the 8 dogs with both behaviors denied the dog access to blankets and that dog subsequently developed flank sucking. The age data were incomplete for the other 3 dogs with both behaviors. No owners of dogs with both behaviors reported that flank sucking preceded blanket sucking.

Frequency—There was no significant difference between dogs with blanket sucking versus flank sucking in the reported frequency of the behaviors (Table 1). Most owners whose dogs sucked blankets (47/62 dogs) or their flanks (13/21) reported that the behavior occurred daily. A small proportion of dogs with blanket sucking (10/62) or flank sucking (3/21) appeared more severely affected and were reported to have the behavior on an hourly basis throughout the day.

Duration—There was no significant difference between blanket- and flank-sucking dogs with regard to the duration of the shortest bouts or the longest bouts (Table 1). For dogs with blanket sucking (n = 51) or flank sucking (16), mean duration of estimated shortest and longest bouts differed by minutes but was accompanied by large SDs.

There was no significant difference between blanket- and flank-sucking dogs in the owner-estimated number of hours per day that the behavior occurred. Almost half of dogs with blanket sucking (24/54) or flank sucking (7/16) engaged in the behavior for < 1 h/d. A few dogs with blanket sucking (4/54) or flank sucking (4/16) spent > 8 h/d engaged in the behavior.

Flank preference—The difference in the proportion of owners who reported that their dog had no side preference (5/18 dogs) was not significantly ($P = 0.059$) different from the proportion of owners who reported that their dog had a side preference (13/18). Owners of dogs with flank sucking were asked if their dogs sucked only on their left side, mostly on their left side, only on their

Table 1—Comparison of data reported in a survey completed by owners of 77 Doberman Pinschers, of which 55 engaged in blanket sucking, 14 engaged in flank sucking, and 8* engaged in both behaviors.

Variable	Behavior		*P* value
	Blanket sucking	Flank sucking	
Mean age of onset (mo)	8 ± 10.7†	17.1 ± 24†	0.030
< 3 mo	26	11	
≥ 3 mo and < 6 mo	36	32	
≥ 6 mo and < 9 mo	17	5	
≥ 9 mo and < 12 mo	2	5	
≥ 12 mo	19	47	0.037
Frequency of behavior			
Monthly	2	5	
Weekly	7	19	
Daily	76	62	
Hourly	16	14	0.196
Mean duration of shortest bout (min)	9.97 ± 12.1†	7.21 ± 7.7†	0.304
Mean duration of longest bout (min)	47.52 ± 40.8†	35.54 ± 42.5†	0.081
No. of hours engaged in behavior/d			
< 1	44	44	
≥ 1 and < 4	30	19	
≥ 4 and < 8	19	13	
≥ 8 (almost all waking hours)	7	25	0.494
Triggers			
Inactivity	70	72	
Increased arousal	18	28	0.323
Availability of soft item	11	N/A	
Amount of interference with quality of life			
None	84	77	
Slight	11	14	
Mild to moderate	2	9	
Definite interference, but still manageable	3	0	0.468
Amount of interference with relationship			
None	81	73	
Slight	10	9	
Mild to moderate	6	18	
Definite interference, but still manageable	2	0	
Incapacitates every aspect of life	2	0	0.407
Can dog be interrupted?			
Easily interrupted	90	85	
Usually can be interrupted	3	5	
Sometimes can be interrupted	7	10	
Cannot be interrupted	0	0	0.560
If interrupted, how soon will dog resume behavior?			
Resumes immediately	36	39	
Resumes within minutes	15	6	
Resumes later on	21	17	
Dog will not resume	2	6	0.973
Does owner deny dog's access to blankets or flank?			
Yes	13	35	
Owner limits dog's access	20	5	
No	67	60	0.286
Prevalence of pica	29 (18/63)	18 (4/22)	0.338

*Data from these dogs were included in both behavior groups. †Mean ± SD. Values are percentages unless otherwise specified.
NA = Not applicable.

right side, mostly on their right side, or on both sides equally. Six of 18 owners reported that their dog sucked only or mostly on its left side, 7 of 18 reported only or mostly on its right side, and 5 of 18 sucked on both sides equally. Thus, 13 owners reported that their dog had a side preference (left, mostly left, right, or mostly right), and 5 owners reported no side preference.

Triggers—As part of the survey, owners were asked an open-ended question regarding what conditions elicited their dogs' blanket- or flank-sucking behavior. A total of 120 triggers were reported (88 triggers for blanket-sucking dogs and 32 triggers for flank-sucking dogs). Thirty-eight percent (29/77) of owners reported more than 1 trigger. The authors grouped the 120 triggers into 3 main categories: inactivity; increased arousal; and, for blanket-sucking dogs, availability of a soft item. In addition to blankets, owners reported that dogs sucked on other fabrics, including stuffed animals, the owner's clothing, pillows, rugs, towels, crate bumpers, and dog beds (especially fleece).

Inactivity was the most frequent trigger reported for blanket sucking (62/88 dogs) and flank sucking (23/32; Table 1). Specifically, inactivity was described by owners as "when bored, crated, at bedtime, when relaxed, cuddling with owner, tired, when wakes up, after a meal, and at nighttime." Dogs with blanket sucking frequently fell asleep with fabric still in their mouth.

The second most commonly reported trigger was increased arousal (Table 1). Specific situations that were considered to cause increased arousal included "dog shows, kenneling, separation from owner, presence but unavailability of a female in estrus, ineffective attention seeking, a high level of visual stimulation, uncertainty, a new situation, a change in environment, a loud noise, or when challenged by another dog." Triggers in the increased arousal category were reported for less than a fifth of dogs with blanket sucking (16/88) and less than a third of dogs with flank sucking (9/32). No significant difference in the frequency of triggers associated with inactivity or increased arousal was identified between dogs with blanket versus flank sucking.

Ten of 88 of the triggers reported by owners of dogs with blanket sucking involved the availability of a soft toy or blanket as a trigger for eliciting the behavior.

Injuries—Seventeen percent (11/63) of dogs with blanket sucking sustained injuries either as a direct or indirect complication of the behavior. Five dogs required surgery to remove obstruction from ingesting fabric; 1 dog required 5 surgical procedures, and another required 2. Two dogs repeatedly vomited because of ingestion of fabric. One dog developed a callus on the lower lip, and 2 dogs had severely worn teeth from blanket sucking. When denied access to blankets, 1 dog carried 2 tennis balls in its mouth in lieu of the blanket. If denied access to blankets and tennis balls, the dog caused self-inflicted injury by scratching. The scratching ceased if the blanket or tennis balls were returned to the dog. One dog sustained a hind limb injury while crated to prevent ingestion of fabric.

Thirty-two percent (7/22) of dogs with flank sucking had physical signs of excessive sucking behavior. One owner reported a repeatedly wet flank, 3 reported substantial hair loss, and 4 owners reported that their dogs developed lesions or ulcerations on the flank. The owner of 1 dog with flank sucking reported 2 types of injuries (hair loss and skin lesions).

Interference with dog's quality of life and owner's relationship with dog—Each owner was asked to report how the amount of time the dog spent engaged in blanket or flank sucking interfered with its normal daily activities and whether the behavior interfered with the owner's relationship with the dog. The owner was asked to score 0 for no interference, 1 for slight interference, 2 for mild to moderate interference, 3 for definite interference that was still manageable, and 4 for interference that incapacitated every aspect of the dog's or owner's life.

There was no significant difference between blanket versus flank sucking regarding the amount of interference with quality of life or relationship with the owner (Table 1). Most owners scored 0, indicating that they thought the behaviors did not interfere with the dog's quality of life (blanket sucking, 53/63; flank sucking, 17/22) or their relationship with the dog (blanket sucking, 51/63; flank sucking, 16/22). Some owners provided their dog with its own blanket for sucking.

There was no significant difference between the groups regarding ease of interruption of the behavior (Table 1). Most owners of dogs in both groups (blanket sucking, 53/59; flank sucking, 17/20) reported that their dog could easily be interrupted from sucking behavior and redirected to another activity. None of the owners reported that their dogs could never be interrupted.

There was no significant difference between the 2 groups in terms of latency to resume sucking following interruption (Table 1). More than a third of dogs with blanket sucking (19/53) or flank sucking (7/18) resumed sucking immediately after interruption of the activity. The remaining dogs resumed sucking within minutes or at some later time. Only 1 dog with blanket sucking and 1 with flank sucking did not resume the behavior after interruption by owners.

There was no significant difference between groups regarding owners' attempts to prevent the behavior (Table 1). Most owners chose not to deny access to blankets (41/61 dogs) or made no attempt to prevent their dog from sucking its flank (12/20). Because of the excessiveness of the behavior and concern about injuries, some owners of dogs with blanket sucking (8/61) completely denied access to blankets. Approximately a third of owners of dogs with flank sucking (7/20) used Elizabethan or cervical collars, a home-made flank wrap, or application of foul-tasting substances to prevent the behavior. Some owners of dogs with blanket sucking (12/61) limited the dog's access to blankets for certain periods during the day when they could be supervised. Only 1 owner limited the dog's flank sucking to 5- to 10-minute periods, after which the behavior was interrupted with a squirt bottle. If that owner physically attempted to remove the dog's mouth from its flank, it would growl.

Pica—Doberman Pinschers with pica were reported to persistently and compulsively mouth and ingest a wide variety of nonfood substances, including, but not limited to, fabrics (blankets, socks, toy stuffing, sneakers, and crate pads), outdoor material (dirt, tree limbs and twigs, and leaves), paper products (paper, paper towels, cardboard, dryer sheets, cotton-tipped swabs, and cigarette butts), plastic and vinyl (toys, jump drive, cell phone, pager, pen, electric tooth brush, shaver, eyeglasses, and remote control), and metal objects (nuts, bolts, and keys). Most dogs ingested a variety of items.

Among dogs from the affected and unaffected groups, 28 dogs had pica. Seventeen were female, and 11 were male. There was no significant difference ($P = 0.705$) in sex between dogs with and without pica. Nineteen owners provided a specific age of onset for pica. The range of onset was 6 weeks to 11 years, and the median mean age of onset was 5 months. The owner of an 11-year-old dog reported that the dog appeared to have learned to eat dirt and tree bark after observing a new dog in the household engage in the behavior. Nine owners could not recall the age of onset or whether the dog was adopted with the existing problem. All owners except 1 prevented their dog from ingesting inedible

material, so accurate estimates of the frequency and duration of pica behavior were not available. Three of 28 dogs wore muzzles outdoors to prevent ingestion of dirt, leaves, tree limbs, and tree bark. Four dogs had surgery for obstructions: 1 for ingestion of a blanket and 3 for ingestion of rocks. The first dog developed acral lick dermatitis after the owner began to deny access to blankets. Only 1 dog discontinued pica behavior at 1 year of age. The remaining 27 dogs continued to consume inedible materials when given the opportunity.

Of the 22 dogs in the affected group that had pica, 18 had blanket sucking and 4 had flank sucking. Of the 18 dogs that sucked blankets, 6 also ingested the blankets and 4 of the 6 dogs ingested other fabrics in addition to the blankets. Seventeen owners of affected dogs reported an age of onset for both pica and blanket or flank sucking. Eight owners reported that the onset of blanket or flank sucking preceded pica. Five owners reported that pica preceded the onset of blanket or flank sucking. Four owners reported a simultaneous onset of pica and blanket or flank sucking.

There was a significant difference between unaffected and affected dogs in the prevalence of pica ($P = 0.001$). The prevalence of pica in affected dogs was close to 29%. Only 8% (6/76) of unaffected dogs had pica. There was no significant difference between dogs with blanket versus flank sucking in the prevalence of concurrent pica. The χ^2 test was also performed without inclusion of the 6 dogs with blanket sucking that only ingested blankets. The prevalence of pica decreased slightly to 23% (16/71) of affected dogs, but was still significantly ($P = 0.013$) higher than the prevalence in control dogs (8%).

Discussion

In the present study of Doberman Pinschers, blanket sucking was more prevalent than flank sucking (74% vs 26%); however, because this was not a random survey, the data may not reflect the true prevalence of the behaviors in the general population. Inherent in a survey study is bias because the data are based on owners' recollections and because owners can choose whether to participate. In the dog show and club membership population, the authors suspect that there may be more of a stigma attached to flank sucking than blanket sucking, the latter being considered by most participating owners as an endearing Doberman Pinscher trait.

Blanket sucking and flank sucking represent aberrant forms of hard-wired ingestive behavior. Although they differ in texture preference, both blanket sucking and flank sucking resemble suckling behavior from which they may derive. Knowing the age of weaning might shed light on the etiology and development of nonnutritive suckling. One could speculate that Doberman Pinscher puppies do not tolerate abrupt early weaning or that this breed of dog produces large litters such that some offspring may not receive adequate suckling opportunities. One breeder reported that 1 puppy from a litter of 11 began blanket sucking at birth, which she attributed to suckling competition with littermates. Unfortunately, no data for age of weaning were available for the present study. The authors did compare the age of acquisition of affected and unaffected dogs but found no significant difference to suggest that affected dogs might have been acquired at a younger age and, thus, possibly weaned at a younger age than unaffected dogs. The possible relationship between early weaning and an increased predisposition to develop sucking behaviors requires further research.

Blanket sucking and blanket ingestion appear to occur on a continuum. Dogs begin sucking and then progress to chewing and ingestion as part of the same behavior. None of the dogs were reported to ingest without at least a brief period of sucking preceding ingestion. Pica is more clearly an ingestive behavior, and results of the present study revealed that it is associated with blanket sucking and flank sucking. Research clearly delineating when normal ingestion ends and pica begins has not been performed to our knowledge. In the present study, pica was defined as the persistent ingestion of nonnutritive substances. Dogs were not considered to have pica if owners reported infrequent attempts at ingesting nonnutritive materials.

There was no significant difference between dogs with blanket versus flank sucking in sex distribution, neuter status, frequency or duration of the behavior, flank preference, types of triggers, or interference with the dog's normal functioning or its relationship with its owner. There was a significant difference in age of onset between the 2 behaviors; flank sucking had a later onset, although 42% of dogs with flank sucking began flank sucking prior to 6 months of age. As reported for human obsessive compulsive disorder[11,12,b] and animal models of compulsive disorders,[5,6] the onset of flank and blanket sucking occurred most commonly before sexual maturity. On the basis of results of the present study, blanket and flank sucking appear to be slightly different manifestations of the same type of behavior in Doberman Pinschers. However, the variation in texture preference and age of onset could suggest that they are closely related conditions, but not phenotypically the same. Future genetic research may provide clarification as to whether flank and blanket sucking in dogs are essentially the same behaviors or related conditions that form part of a spectrum disorder.

Previous studies[13,14] of dogs with acral lick dermatitis detected a predisposition for the left forelimb to be affected. In the flank sucking population in the present study, there did not appear to be a predisposition for 1 flank to be chosen over the other.

Owners could readily predict when their dogs would engage in flank and blanket sucking. Blanket sucking and flank sucking resembled ritualized compulsions that occurred during set times of day and in specific situations for each dog. For most dogs, blanket and flank sucking occurred primarily during periods of inactivity, supporting Houpt's[1] anecdotal observation that these behaviors resemble suckling in neonates. Other dogs engaged in flank and blanket sucking during periods of increased arousal that were subjectively thought by the owners to be associated with high arousal or anxiety, which suggests that the behaviors may have been performed as a coping strategy. Both in-

activity, especially at bedtime and following mealtime, and increased states of arousal can be associated with psychologic stress and are frequent triggers for compulsive behavior in children[12,15] and animals.[16]

Most owners reported that blanket sucking and flank sucking were easy to interrupt and that the behaviors did not interfere with their relationship with the dog or with the dog's normal functioning. Nevertheless, approximately 50% of dogs resumed sucking immediately or within minutes following owner intervention, indicating that, despite most owners' interpretation, discouraging affected dogs from the behaviors was not easy and that the behaviors may be compulsive in nature. Most owners of dogs with blanket sucking considered the behavior as normal or, at worst, mildly irritating because of the slurping sound the dogs made. More owners of dogs with flank sucking regarded the behavior as abnormal.

For some affected dogs (18% of dogs with blanket sucking and 32% of dogs with flank sucking), the behavior occurred with sufficient frequency and intensity that the dogs sustained obvious physical injuries. For reasons of health concern, a small percentage of owners of dogs with blanket sucking denied their dogs access to fabric and approximately a third of those owners used some means of physical restriction to prevent their dogs from engaging in the behavior. One blanket-sucking dog was so severely affected that it engaged in other oral and potentially self-injurious behaviors (carrying 2 tennis balls in its mouth and repeated self-scratching when prevented from blanket sucking and denied access to the tennis balls). Some blanket-sucking dogs also engaged in flank sucking or paw licking, which caused acral lick dermatitis in 14 cases.

In part because of the breed predilection, flank sucking and blanket sucking are thought to have a genetic component, possibly related to a comparatively anxious temperament. Considering the age of onset, development, frequency, duration, occurrence of the behaviors in response to inactivity or increased arousal, and potential for self-injury, both of the behaviors meet published criteria for diagnosis as obsessive-compulsive disorders.[17] Although owners may not consider nonnutritive suckling behaviors like blanket sucking and flank sucking to be problematic, veterinarians should advise owners that they are abnormal compulsive behaviors that are in some cases harmful and that they should deal with them accordingly. Approximately a third of the affected dogs also had pica, which is associated with substantial risk of causing intestinal obstruction. Although pica can be caused by medical disorders, some cases of pica in humans have accompanying symptoms consistent with compulsive-impulsive disorders.[18]

Owners should identify and address any stressors in the dog's environment that trigger blanket- or flank-sucking behaviors. For those dogs that suck a blanket or flank during periods of inactivity, owners should provide a safe alternative substrate for the dogs to mouth. Owners should be advised to interrupt and redirect the dog's behavior and to avoid punishment that can increase stress and sucking behavior. For seriously affected dogs that are in danger of injuring themselves, administration of medication such as a serotonin reuptake inhibitor may be necessary.[5,6,10]

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