

"I have a 7 year old spayed female mixed breed dog that recently began to leave its bedding wet after sleeping. I believe this is urine and want to know what might cause this."

Your dog has probably developed urinary incontinence and here is a brief overview of this clinical problem.

Urinary incontinence is defined as the involuntary passage of urine. Incontinence often results in the affected dog dribbling urine and/or leaving a puddle of urine on the floor after lying down and sleeping. Although incontinence can happen in any age dog, middle-aged to aged dogs are more affected. Females develop urinary incontinence more frequently than males.

One of the most common causes of incontinence occurs as a result of bacterial urinary tract infection. This form is often called "urge" incontinence because bladder inflammation causes the affected dog to have an uncontrollable urge to urinate, which usually results in small amounts of urine being produced frequently and suddenly. Dogs with urge incontinence due to urinary tract infection often strain when urinating, may have blood in their urine and make frequent attempts to urinate even though there is no urine to pass.

Young dogs may dribble urine due to developmental abnormalities associated with their urinary system. The most common of these abnormalities occurs primarily in female dogs and is called ectopic ureter. The ureter is the tubular structure that comes from each kidney and empties urine into the bladder. If the opening of one or both of the ureters empties abnormally into a structure such as the vagina rather than the bladder, this results in the puppy continuously dribbling urine.

Spinal cord injuries as a result of trauma or intervertebral disk rupture (the disk cushions the space between the bony vertebrae of the back) may be the cause of incontinence in some dogs due to interruption of the normal nerve pathways, which control voluntary urination. Usually dogs with this form of incontinence have additional signs of neurologic dysfunction such as paralysis, an abnormal gait, a drooping tail, and/or fecal incontinence.

Functional abnormalities of the urethral sphincter (the outlet from the bladder to the outside) often result in urinary incontinence. This sphincter is essential in preventing urine leakage. Spayed female dogs make up the majority of the population experiencing this type of incontinence.

Sphincter-related incontinence is a likely cause of your dog's problem. It is often labeled hormone-responsive incontinence since hormones such as estrogen frequently play an important role in treatment of these cases. In addition, other drugs such as phenylpropanolamine, may also be beneficial to treat this cause of incontinence, which usually requires long-term control with medication.

If you have a pet experiencing urinary incontinence, consult your veterinarian. By using a combination of history, physical examination findings, and diagnostic tests such as lab work and radiographs or ultrasound your veterinarian can usually pinpoint the cause of urinary incontinence. Many cases can be successfully controlled or cured with appropriate treatment.

This column is provided by the faculty of the OSU Boren Veterinary Medical Teaching Hospital.

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