

# Urinary Tract Infections – Chronic (Episioplasty)

The bladder is a reservoir that collects urine from the kidneys. Urine is voluntarily expelled from the bladder via a tube called the urethra. In female dogs, the urethra opens in the terminal part of the vagina. The vulva is a part of the female dog's external genitalia that forms the entrance to the vagina. This structure is composed of skin folds that in some dogs can be excessively large or may contain excessive amounts of fat.

## **Recurrent bladder infections**

By definition, appropriate treatment of bladder infections with subsequent reinfection of the bladder is called a recurrent bladder infection. Bladder infections are more common in female dogs than in males due to the short urethra in females, which allows for migration of bacteria into the bladder. In addition, abnormalities of the anatomy of the vagina or vulva may predispose dogs to develop infections. Excessive skin folds around the vulva trap moisture, thus serving as a perfect breeding ground for bacteria. These bacteria then migrate into the vagina and into the bladder via the urethra. Other causes of recurrent bladder infection may include bladder stones, bladder polyps, bladder cancer, vaginal strictures, vaginal septae and other anatomical abnormalities.

## **Signs and diagnosis**

Warning signs of a bladder infection include frequent urination, straining to urinate, passing small amounts of urine each time of urination, foul smelling urine, dark colored urine, and blood-tinged urine. Excessive skin folds around the vulva with a rash on the vulva may also be present.

A urinalysis and culture of the urine are done to see if a bladder infection is present. Abdominal ultrasound is used to evaluate the kidneys, bladder and other internal organs. In addition, cystoscopy is usually performed to rule out diseases

of the vagina, urethra and bladder. This test requires general anesthesia in order to examine the vagina, urethra and bladder with a very small camera. Tests done prior to surgery may include a complete blood count, blood chemistry profile, and urinalysis to check internal organ health.

### **Treatments**

Treatment of recurrent urinary tract infection is always directed at the underlying cause. Once your companion's urologist identifies the cause of the problem it will be specifically addressed. A common problem is excessive skin folds surrounding the vulva. A surgical procedure, involving removal of the excessive skin folds and associated excessive fat, is typically performed on the day of the cystoscopic examination of the urinary tract. This procedure is called an episioplasty.

For more information on this subject, speak to the veterinarian who is treating your pet.