

## Hematuria

- Hematuria is the condition of having blood in the urine.
- Bloody urine may be caused by abnormalities in the urinary tract or by disease processes elsewhere in the body that can affect the urinary tract.
- Hematuria may be an indication of a serious blood clotting or platelet disorder.
- Treatment varies depending on the cause.

### What Is Hematuria?

Hematuria is the condition of having blood in the urine. In female dogs that have not been spayed, it is important to differentiate blood associated with a heat cycle from hematuria.

### What Causes Hematuria?

Bloody urine may be the result of abnormalities within the urinary tract or of disease processes elsewhere in the body that can affect the urinary tract. Some of the possible causes of hematuria are:

- Bacterial, fungal, or viral infections in the urinary tract, including the prostate
- Bladder and/or kidney stones or crystals
- Idiopathic cystitis (urinary bladder inflammation with unknown cause in cats)
- Polycystic kidney disease (more common in cats)
- Blood clotting disorders (common with consumption of toxins, such as rat poison)
- Thrombocytopenia (an abnormally low number of platelets in the blood)
- Trauma of the abdomen or urinary tract
- Tumors involving the urinary tract

### What Are the Clinical Signs of Hematuria?

Urine may range in appearance from normal to pink- or red-tinged, or it may contain obvious blood and actual blood clots. Some of the clinical signs associated with hematuria include:

- Drinking more and urinating more often
- Straining to urinate
- Urinary accidents in the house/outside of the litterbox
- Inability to urinate (a medical emergency!)
- Vocalizing in the litterbox
- Bruising on the skin
- Bleeding from the nose or gums
- Bleeding within the eyes
- Bloody vomit or feces

### How Is Hematuria Diagnosed?

Your veterinarian will start by taking a medical history of your pet, including asking about possible trauma or exposure to toxins or infectious diseases. He or she will also perform a complete physical examination.

The basic diagnostic workup includes blood tests, such as a biochemistry panel and complete blood count (CBC), as well as a urinalysis. Depending on the potential underlying disease, your veterinarian may recommend more specific blood tests, such as a test for leptospirosis (a contagious bacterial infection of dogs that is transmissible to humans) or a panel to check for abnormalities in blood clotting. If your veterinarian suspects a urinary tract infection, a urine culture test can help identify the specific bacteria that may be present. Abdominal radiographs (x-rays) or an abdominal ultrasound study may also help find urinary tract stones, tumors, or other abnormalities.

### How Is Hematuria Treated?

Treatment varies depending on the specific cause. For example, urinary tract infections may be treated with antibiotics. Kidney or bladder stones may require a therapeutic diet or surgery. Blood clotting and platelet disorders can be extremely serious and often require hospitalization and intensive care.