

# Bloody urine can mean bladder stones

Mrs. Taylor was feeling very sorry for her cat, Jessica, because the cat seemed to be in discomfort when she tried to urinate. As I examined Jessica, Mrs. Taylor



**ELAINE WEXLER-MITCHELL**  
THE CAT DOC

revealed Jessica's urine was bloody. This was the second time Jessica had visited my office for hematuria, or blood in the urine.

Hematuria occurs frequently in cats and has many causes, including stress, trauma, bacterial or viral infections, bladder stones, or for no known reason. If an owner sees it, it is a good idea to have the cat examined by a veterinarian and a urinalysis performed.

Recurrent bacterial bladder infections are not common in cats, so if a cat has more than one incident of hematuria, a more in-depth workup is recommended.

Jessica had a urinalysis, and a few crystals and many red blood cells were observed on microscopic examination. I asked Mrs. Taylor if she could leave Jessica at our office for further testing.

I was considering performing an ultrasound or X-raying the bladder. Plain X-rays can detect some types of bladder stones, but special X-rays called pneumocystograms and double contrast cystograms can be needed to detect other types of stones or irregularities within the lining of the bladder.

Cats typically need to be

sedated for the special X-rays because a bladder catheter is needed.

We started with an ultrasound of Jessica's bladder. It showed stones. We took an abdominal X-ray to count the stones and to see if there were stones in her kidneys or ureters. No other stones were present.

I called Mrs. Taylor to discuss the findings and options for treatment. There are two types of commonly found stones in cats – struvite and calcium oxalate. Feeding a special diet can dissolve struvite, but calcium oxalate stones will not dissolve with diet, and require surgical removal. Based on the urine pH, I suspected Jessica's bladder held undissolvable calcium oxalate stones.

A technique called urohydropropulsion is an option for female cats with very small stones. This method pushes the stones out without surgery. Jessica's stones were too large for this option, and Mrs. Taylor agreed to surgery. We removed Jessica's stones that day.

They were submitted to a laboratory for analysis so we would know exactly what we were dealing with and what preventive measures could be taken.

Jessica's home care consisted of antibiotics, pain reliever and a special diet designed to help prevent both types of stones, pending laboratory results. She did well postoperatively, and when the stone analysis arrived two weeks later, my suspicion of calcium oxalate stones was confirmed.

Calcium oxalate stones can recur, so Jessica's

treatment regimen consisted of continuing the diet, re-checking her urinalysis in one month, and X-rays in six months if no other problems occurred.

Grocery store cat food that had been billed as a special urinary tract diet was discontinued, since it potentially triggered the stones.

Not every cat with hematuria has bladder stones, but it is a good idea to have a cat with recurrent signs tested. It is amazing when you see an actual bladder stone to imagine how something like it could form within a bladder. I describe it as similar to rock candy – some crystals, bacteria or mucous form a small core, then other crystals latch on and form the stone.

Many stones are sharp and irregular, so I cannot understand how some cats can go weeks to months without showing signs of discomfort. Bladder stones are especially dangerous to male cats, because small stones can become lodged in the cat's urethra and create a life-threatening urinary blockage. If you have a male cat, it is important to know that he is urinating daily.

If you have a cat with bladder stones and choose to attempt dissolving them with diet, it can take weeks, and follow up X-rays are needed. If a significant decrease in stone size is not observed within a couple of weeks, surgery should be considered.

Dr. Wexler-Mitchell owns  
The Cat Care Clinic  
in Orange, [catcare.com](http://catcare.com),  
714-282-2287.