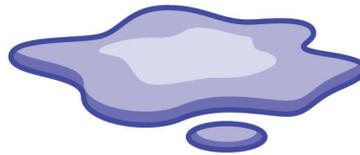


**CASE OF THE MONTH**

**BLADDER STONES**

**Pet:** Tomas\*, an 8-year-old Papillon



**TOMAS' STORY:**

At around 3 years of age, Tomas started having urinary troubles. The house-trained little dog started to have urinary accidents indoors. He also asked to go outside more often, and his owners noticed him straining when he had to pee. Alarmingly, when he urinated on the white snow, his family noticed blood in the urine.

Tomas was brought to his family veterinarian where blood and urine tests were performed. Abdominal x-rays revealed bladder stones. Tomas underwent a surgery called a cystotomy, to remove the bladder stones in the fall of 2018. Despite antibiotics and a special urinary diet, Tomas developed more bladder stones a year later, and underwent a second cystotomy in the fall of 2019. Unfortunately, Tomas' stones were made predominantly of calcium oxalate, a mineral that doesn't dissolve well with medical management. Poor Tomas kept developing stones, and needed two more cystotomies in fall of 2021, and the spring 2023. When new stones appeared again in the fall of 2023, Tomas' veterinary team decided to try a different approach.

**ABOUT THE CONDITION: BLADDER STONES**

Bladder stones are also called uroliths. They develop when minerals that are normally dissolved in the urine precipitate. These minerals first form small crystals, which can then grow into grit and large stones.

In dogs, bladder stones can develop for a variety of reasons. In some cases, bacterial urinary tract infections (UTI) cause chemical changes in the urine that promote stone formation. For other dogs, dietary factors create a mineral overload and pH environment that predisposes to stones. In yet other dogs, metabolic abnormalities make stone formation more likely.

**TREATMENT**

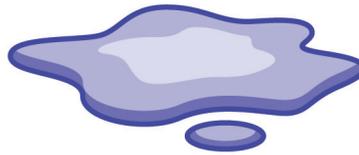
Some types of stones can be dissolved by using special diets, drugs, or supplements that change the pH of the urine. Large stones, and those made of calcium oxalate do not dissolve well with medical management, and usually need to be removed surgically. This procedure can be urgent if the stones are blocking urine from being expelled from the body. Antibiotic therapy is an important part of treating many types of stones.



**CASE OF THE MONTH**

**BLADDER STONES**

Continued...



Tomas' stones couldn't be dissolved with diet. He received multiple cystotomy surgeries to remove his stones, as well as antibiotic therapy, and diet to try to prevent the formation of new stones.

The urethra is the small tube through which urine drains from the bladder and exits the body. In male dogs, the urethra is narrowest as it travels through the penis. Small stones can become trapped in the urethra, and may cause a dangerous obstruction. When Tomas needed his fifth cystotomy, his surgical team decided to take an approach that would reduce the risk of obstruction, and might even help him naturally pass the small stones he was developing. They performed a urethrostomy procedure. This surgery allows the urine to exit the body just under the tail...before it has to travel through the narrowest part of the urethra. This means that more stones will be able to be passed before they become too large, and are trapped in the body.

**CLAIM OUTCOME**

Between 2018 and today, Tomas needed more the \$15,000 in veterinary care for his urinary problems. His family's Pets Plus Us Accident and Illness More plan has reimbursed them more than \$10,000\*\* of those fees. We're sure glad we could be there for you, Tomas!

\*Details changed for privacy.

\*\*Sample claim for illustrative purposes - details have been changed for privacy. Based on 2023 PTZ Insurance Services Ltd. actual claims data. Dollar amounts have been rounded down.

