DOG EARED JOURNAL

Editor Needs YOU

This newsletter is for the members of the HRKC, and we'd like to include YOUR news, brags, events and pup pictures (pups of all ages!). Please send your stuff to Marie at hrkcnews@yahoo.com.

Web Pages

These pages present the club to the wider world, and serve members in various ways. In the coming months, the pages will take on a new look and structure. Please - I need your help here too! Send ideas, requests, comments and content to hrkcnews@yahoo.com.

HRKC Officers

President: Susan Parr

VP: Chris Cornell

Secretary:Lorraine Shore

Treasurer: Jo Chinn

Summer Shows!

(I know, one is considered spring and the other fall, but they both land in traditionally summer months...)

Agility, Rally & Obedience (ARO):

June 1, 2 and 3, 2018 Carrie Blake Park Ball Fields

All Breed

July 27, 28 & 29, 2018 Sequim High School Fields

There will be FASTCAT again this year.
There will be three runs (two on Sat/one Sun). The FASTCAT was extremely popular last year!

Could Acupuncture Medical Therapy Work for Your Dog?¹

Acupuncture is one of the most common natural therapies used by holistic veterinarians.

The practice of acupuncture involves stimulating the nervous system by penetrating "acupuncture points" with needles, injectable liquids (such as vitamins or homeopathics), or electrical stimulation.

Acupuncture is most effective for dogs suffering:

- Musculoskeletal problems such as hip dysplasia, anterior cruciate ligament (ACL) injuries, and osteoarthritis;
- Allergies and immune disorders;
- Bladder problems and gastrointestinal disorders.

Most holistic vets won't use acupuncture as a sole therapy, but incorporate it into a treatment regimen. For example, some vets typically begin a treatment with acupuncture and laser therapy three times a week for a month and then follow up with procedures on an as-needed basis.

Nutritional supplements and herbal remedies are often used to provide immediate relief for some health problems.

The original version of this column, "The Natural Vet" by Shawn Messonnier, DVM, was published in AKC Family Dog.

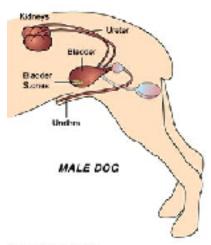
Bladder Stones in Dogs²

By Ernest Ward, DVM Emergency Situations, Medical Conditions, Surgical Conditions

What are bladder stones?

¹ http://www.akc.org/expert-advice/health/general-health/heal-fido-acupuncture-could-help-an-ailing-dog/

² https://vcahospitals.com/know-your-pet/bladder-stones-in-dogs



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Bladder stones (*uroliths* or *cystic calculi*) are rock-like formations of minerals that develop in the urinary bladder. There may be a large, single stone or a collection of stones that range in size from sand-like grains to gravel. It is common for a mixture of both small and large stones to be present.

What other kinds of stones are there?

Gall stones form in the gall bladder and contain bile salts. Kidney stones are mineralized formations that develop in the kidney. Neither of these are directly related to bladder stones. Even though the kidneys and urinary bladder are both part of the urinary system, the development of kidney stones is not usually linked to the development of bladder stones. All stones form as a result of disease or inflammation in the affected structure.

What are the clinical signs of bladder stones?

The most common signs that a dog has bladder stones are *hematuria* (blood in the urine) and *dysuria* (straining to urinate). Hematuria occurs because the stones rub against the bladder wall, irritating and damaging the tissue and causing bleeding. Dysuria may result from inflammation and swelling of the bladder walls or the urethra, from muscle spasms, or due to a physical obstruction to urine flow caused by the presence of the stones. Veterinarians assume that the condition is painful, because people with bladder stones experience pain, and because many clients remark about how much better and more active their dog becomes following surgical removal of bladder stones.

"If the obstruction is not relieved, the bladder may rupture"

Large stones may act almost like a valve or stopcock, causing an intermittent or partial obstruction at the neck of the bladder, the point where the bladder attaches to the urethra. Small stones may flow with the urine into the urethra where they can become lodged and cause an obstruction. If an obstruction occurs, the bladder cannot be emptied fully; if the obstruction is complete, the dog will not be able to urinate at all. If the obstruction is not relieved, the bladder may rupture. A complete obstruction is potentially life threatening and requires immediate emergency treatment. A urinary obstruction will usually be recognized in a dog that is straining to urinate without producing any urine, or is only producing small squirts of urine.

How did my dog get bladder stones?

There are several theories of how bladder stones form. The most commonly accepted theory is called the *Precipitation-Crystallization Theory*. This theory states that one or more stone-forming crystalline compounds is present in elevated levels in the urine. This may be due to dietary factors or due to some previous disease in the bladder, especially a bacterial infection. Sometimes the condition may be due to a problem with the body's metabolism. When the amount of this compound exceeds a threshold level, the urine becomes *saturated* and cannot hold any more of the compound. The saturation level depends on the specific minerals that are present and the pH of the urine. The excess precipitates out of solution and forms tiny crystals. The sharp crystals irritate the bladder lining, causing a production of mucus. The crystals and mucus stick together, forming clusters that gradually enlarge and harden into stones. This is similar to the way "rock candy" is formed.

How quickly can bladder stones form?

Bladder stones can develop within a few weeks or they may take months to form. Speed of growth will usually depend on the quantity of crystalline material present and the degree of infection present. Although it may take months for a large stone to grow, some sizeable stones have been documented to form in as little as two weeks.

How are bladder stones diagnosed?

The symptoms of bladder stones are similar to those of an uncomplicated bladder infection or cystitis. Most dogs that have a bladder infection do not

have bladder stones. Therefore, we do not conclude that a dog has bladder stones based only on these common clinical signs.

Some bladder stones can be palpated (felt with the fingers) through the abdominal wall. However, failure to palpate them does not rule them out. Some stones are too small to be felt in this manner, or the bladder may be too inflamed and painful to allow palpation.

"Most bladder stones are visible on radiographs (x-rays) or an ultrasonic bladder examination."

Most bladder stones are visible on radiographs (x-rays) or an ultrasonic bladder examination. Some bladder stones are *radiolucent*, or are not visible on radiographs because their mineral composition does not reflect x-ray beams. They can be detected by an ultrasound examination or with a *radiographic contrast study*, a special x-ray technique that uses dye or contrast material to outline the stones within the bladder. Therefore, one or more of these diagnostic imaging techniques should be performed on dogs that show signs of abdominal pain or have recurrent episodes of cystitis.

How are bladder stones treated?

In general, there are three main treatment options for bladder stones: 1) surgical removal; 2) non-surgical removal by urohydropropulsion, and 3) dietary dissolution. The specific treatment that is recommended for your dog will depend on the type of stone that is present. Your veterinarian will discuss the pros and cons of each treatment option with you in more detail, based on your dog's individual circumstances.

Option 1: Surgical removal of bladder stones. This is often the quickest way of treating bladder stones; however, it may not be the best option for patients that have other health concerns, or in whom general anesthesia could be risky. With this option, the stones are removed via a *cystotomy*, which means that the bladder is surgically exposed and opened so that the stones can be removed. This surgery is routinely performed by many veterinarians and dogs usually make a rapid post-operative recovery. If the stones have obstructed the urethra, so that the dog is unable to urinate, an emergency procedure must be performed IMMEDIATELY to save the dog's life.

Option 2: Non-surgical removal. If the bladder stones are very small it may be possible to pass a special catheter into the bladder and then flush the stones out, using a technique called urohydropropulsion. In some cases,

this procedure may be performed with the dog under heavy sedation, although general anesthesia is often necessary. If your veterinarian has a cystoscope, small stones in the bladder can sometimes be removed with this instrument, thus avoiding the need to cut the abdomen and bladder open. Either of these procedures may be used to obtain a sample stone for analysis so that your veterinarian can determine if dietary dissolution is feasible.

Option 3: Dietary dissolution. In some cases, bladder stones can be dissolved by feeding the dog a special diet that is formulated to dissolve bladder stone(s). This diet will be tailored to the specific type of stone that is present. The advantage of this option is that it avoids surgery. It can be a very good choice for some dogs. However, it has three disadvantages:

- It is not successful for all types of stones. Stone analysis is **necessary** to determine if it is the type of stone that can be successfully dissolved. This may not be possible in all cases. Sometimes, your veterinarian will make an educated guess on the type of stone, based on the radiographic appearance and the results of a urinalysis.
- It is slow. It may take several weeks or a few months to dissolve a large stone so the dog may continue to have hematuria, dysuria, and recurrent infections during that time. The risk of urethral obstruction remains high during this period.
- Not all dogs will eat the special diet. These diets will not work unless they
 are fed exclusively. This means that NO TREATS or supplements can be
 given to your dog while it is on the special diet.

Are there any other treatment options?

In some selected referral centers, a fourth option may be available to treat bladder stones. This option is *ultrasonic dissolution*, a technique in which high frequency ultrasound waves are used to disrupt or break the stones into tiny particles that can then be flushed out of the bladder. It has the advantage of immediate removal of the offending stones without the need for surgery. Your veterinarian will discuss this treatment option with you if it is available in your area.

Can bladder stones be prevented?

Prevention is possible in some cases, depending on the chemical composition of the stones. There are at least four types of bladder stones common in dogs (see our handouts on struvite, urate, cystine and calcium oxalate bladder stones for more specific and detailed information).

"bladder stones should be analyzed for their chemical composition" Whenever possible, bladder stones (either those that are removed surgically or those small ones that have been passed in the urine), should be analyzed for their chemical composition. This will permit your veterinarian to determine if a special diet will be helpful in preventing recurrence. If the stones formed because of a bacterial infection, it is recommended that periodic urinalyses and urine cultures be performed to detect sub-clinical recurrences and determine if antibiotics should be prescribed. Periodic bladder x-rays or ultrasounds may be helpful in some cases to determine if bladder stones are recurring. Early recognition may allow your veterinarian to adjust your dog's diet or medications before your pet requires surgery.

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Create an Easter Egg Hunt That Your Dog Will Go Nuts Over³ By <u>Anna Burke</u> Mar 23, 2018

Easter is right around the corner, and children aren't the only ones who enjoy hunting for treats. Setting up a dog Easter egg hunt is a great way to test your pup's sense of smell, and is a fun activity for the whole family — as long as safety remains a top priority. Here are some tips to help get things rolling.

Assemble your eggs

Any good Easter egg hunt needs two things: eggs and willing participants. Plastic eggs do, however, pose some risks for dogs. Choose large plastic eggs for your hunt so that your dog cannot swallow the eggs whole. If your dog shows signs of wanting to chomp down on the eggs, skip them altogether and just hide the treats to avoid ingestion of sharp plastic pieces.

Choose your treats

Your dog relies on his nose to find treats. Choose strong smelling ones to place in your eggs, and lead your pup to the first one to give him a hint about the game to come. As you progress throughout the hunt, reward him for discovering new eggs with an excited voice that will keep him motivated. You may also want to select smaller-sized treats so that your pet isn't eating too many goodies in a short amount of time!

Leash the participants

Keeping your dog on a leash will help reduce the risk of accidental ingestion. It will also help you guide him towards hard-to-find eggs, and will reduce the risk of an altercation in multiple dog hunts. Organized Easter egg hunts for dogs will probably have leash rules already in place, and this is a good rule to enforce if you are hosting a hunt for your friends or organization.

Private parties are okay

Not all dogs enjoy hunting for eggs in groups. Dogs with food guarding behaviors, or who do not get along well with other canines, would do better with

 $^{^3\} http://www.akc.org/expert-advice/lifestyle/fun-with-your-dog/dog-easter-egg-hunt/$

an individual Easter egg hunt. These are easy to arrange. Just set up personal hunts with each dog's favorite treats and take turns if you have multiple pups participating.

Separate hunts for separate species

Easter egg hunts might be a great activity for the whole family, but make sure you don't mix chocolate with dog treats. Keep dogs inside and away from Easter egg hunts with candy. Make sure you count all the candy eggs you hide for the kids to prevent your pup from accidentally eating a harmful substance. You may also want to count your dog's Easter eggs to make sure he's found them all. Doing this will ensure he doesn't find some later and chew on the plastic.