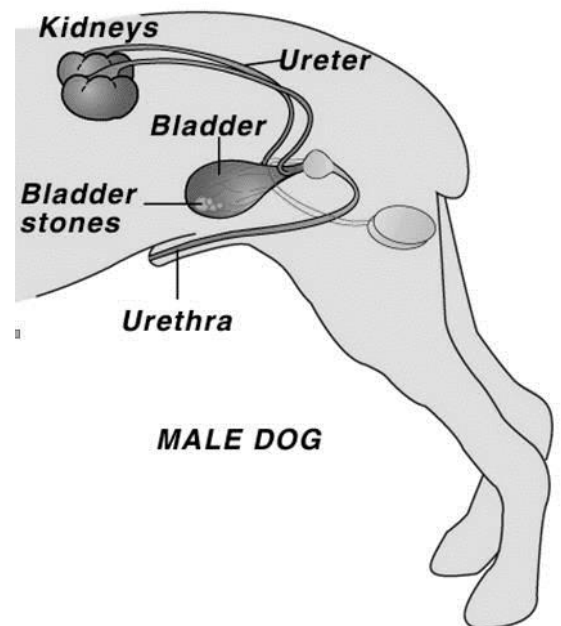


Post-Op Cystotomy Handout

Thank you for choosing Avonhead Vets to complete a cystotomy (bladder stone removal) procedure on your beloved dog – we can assure you, we have taken every precaution to ensure they have received the best care and treatment, while they have been with us today 😊.

Bladder stones can form in dogs just like they do in humans. The stones themselves (uroliths or calculi) can be described as rock-like collections of minerals that form in the urinary bladder.

They may occur as a few large stones or as collections of multiple small stones. Some patients with bladder stones show no signs of any kind and the stones are discovered incidentally but there are some changes that might promote a search for stones. Bloody urine, straining to urinate or an increase in the frequency of urination are the main signs.



WHY DO BLADDER STONES FORM?

There are multiple factors involved in the formation of bladder stones in dogs. Some of these include:

- Increased or high levels of minerals (e.g. calcium, magnesium and phosphate) within the urine to allow supersaturation and precipitation of crystals. These crystals stick together, and stones gradually form, over time increasing in number and size.
- Alkaline or acidic urine pH- different types of stones will form in acidic or alkaline urine so the aim is to keep the pH neutral
- Bacterial infections in the bladder can alter the pH of the urine and subsequently encourage crystal formation
- Abnormal metabolism of various minerals by an individual dog. Some breeds are more prone to this (e.g. Dalmatians and the formation of urate uroliths).

WHY SURGICAL REMOVAL AND WHAT IS IT?

The most effective treatment solution is to remove them surgically by opening the bladder through an abdominal incision. Following two to four days of recovery, most patients rapidly improve. The haematuria (blood in urine) will often persist for a few days after surgery before resolving. Surgery may not be the best option for patients that have other health concerns. However, dogs with urethral obstruction require surgery as soon as possible to minimise other complications.

PREVENTION OF STONES

In order to minimise or prevent recurrence of bladder stones, we send samples of your dog's stones to the specialists at Minnesota Urolith Centre, in America for analysis and what the mineral content of the stones is. This is **free** to you, thanks to the food company, **Hills Pet Nutrition**.

In general, diet is the first place we start to prevent recurrence of bladder stones in dogs - once the stones have been surgically removed, most types of stones can be prevented from recurring by adhering to a prescription diet. Changing the diet has several beneficial effects: it reduces the concentration of minerals that are an issue, alters the pH of the urine and in doing so creates a less hospitable environment for bacteria to grow. The results from Minnesota (USA) Urolith Centre help guide us to the ideal diet for your dog. Increase water consumption as much as possible to help dilute the urine to further decrease chances of bladder stone formation.

Should you have any enquiries or further concerns about the post-operative care of your dog, please do not hesitate to phone us at (03) 358 4407 to discuss.

We hope they have a smooth recovery and get well soon!

WARMEST WISHES, THE TEAM AT AVONHEAD VETERINARY CLINIC