

DALMATIAN HEALTH & WELFARE

URINARY STONES

Urinary stones can take many forms, but the type most relevant to Dalmatian health & welfare is uric acid (or 'urate') stones. All Dalmatians carry a genetic mutation which prevents them from processing uric acid, a bi-product from all kinds of foods. Instead it is excreted in urine. Although Dalmatians excrete higher concentrations of uric acid, only a minor proportion develop stone problems. Uric acid is not very soluble, and there is a risk that it can deposit in the bladder, and sometimes the kidney. Initially, the deposits resemble fine sand, but can subsequently progress to coarser grit and eventually to a stone. The presence of uric acid crystals, whether large or small, can cause irritation to the bladder and urinary tract, giving rise to infection. Urinary stones which pass into the urinary tract can cause blockage, which is very serious and requires immediate veterinary attention. Dogs appear to be at higher risk than bitches to urinary stones, believed to reflect the anatomical differences in their urinary tracts.

HOW COMMON ARE URATE STONES IN DALMATIANS?

It is very difficult to be precise. The only available UK data is from the KC/BSAVA Health Survey for Dalmatians. The epidemiologist who analysed the data advised that the incidence is somewhere within a 'best case' scenario of 1.1%, a 'worst case' of 3.5%, and a reasoned 'middle-of-the-road' value of 1.8%. These figures are indicative, hence some caution is required. They were based upon a sample of 452 live dogs and 199 deaths (none of the latter of which were attributed to urinary stones).

WHAT CAN BE DONE TO REDUCE THE RISK OF URINARY STONES?

It is important that a dog is given frequent opportunity to urinate, since this causes any sediment to be 'flushed out' before it can progress to a stone. Ready availability of fresh water for any dog is an essential, but it is advantageous to encourage water intake in order to increase the frequency of urination and to dilute any uric acid in the urinary system. Frequent replacement of water arouses curiosity from a dog, and a desire to drink. If you feed a 'dry' diet, put some water on it. There is no need to allow it to soak and the dog will take in the water as it eats. There is a proprietary Breed-specific diet available from normal retail outlets, which is low in 'purines' (the principal food source of uric acid). Some owners have formulated their own diets which are also low purine. Further information is available if required.

WHAT ARE THE SIGNS OF URINARY STONE FORMATION?

Any urinary infection or apparent discomfort on urination, should be regarded with caution, and veterinary advice sought. If a dog is exhibiting clear pain, especially with a lack of urination, and possibly arching of the back, urgent veterinary attention is essential. A dog experiencing pain for any reason should always be referred immediately to a vet

WHAT TREATMENTS ARE AVAILABLE FOR DALMATIANS WITH URINARY STONES?

Uric acid crystals or stones can sometimes be dissolved using prescription diets or medication, or more commonly a combination of both. In extreme cases, surgical intervention may be necessary.

IF IN ANY DOUBT, ALWAYS CONTACT YOUR VET