

MINNESOTA UROLITH CENTER

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WHAT PREVENTATIVE MEASURES SHOULD I TAKE UNTIL I RECEIVE QUANTITATIVE MINERAL ANALYSIS RESULTS?

Urolith formation is a process that typically takes several weeks (eg. infection induced struvite), to months (eg. calcium oxalate) rather than days. The most common "cause" of rapid recurrence of uroliths is incomplete removal at the time of surgery.

Until quantitative mineral analysis on the urolith is completed, we recommend the following steps.

- Perform post-operative radiographs of patients with multiple urocystoliths. Double contrast cystography may be necessary if the urocystoliths were not easily observed on pre-operative survey films.
- If small stones are detected on post-operative films, they may be able to be removed non-surgically either by catheter retrieval¹, or voiding urohydropropulsion² after healing takes place.
- Feed a diet unlikely to enhance urolith formation. We typically feed a diet that avoids mineral excess, and promotes a neutral urine pH. We often feed a diet designed for mild to moderate renal insufficiency. If possible, feed a canned diet to promote dilute urine. Once urolith results are received, refer to accompanying recommendation sheets.
- Obtain cystocentesis urine samples to monitor for, and prevent secondary urinary tract infections.

¹Osborne CA, Lulich JP, Unger LK: Nonsurgical retrieval of uroliths for mineral analysis. In Current Veterinary Therapy XI. pp 886-889, 1992.

²Lulich JP, Osborne CA, Unger LK, et al: Nonsurgical removal of urocystoliths by voiding urohydropropulsion. In Journal of the American Veterinary Medical Association. Vol 203, pp. 660-663, 1993.

Osborne CA, et al.: Canine and Feline Urolithiasis: Relationship of Etiopathogenesis to Treatment and Prevention. In Canine and Feline Nephrology and Urology, Osborne and Finco 1995, pp 798-888