**CANINE COMPOUND UROLITHS**

Uroliths with a center composed of a different material than the outer layer(s) are called compound. Compound uroliths commonly occur when metabolic uroliths (e.g. calcium oxalate, urate) contribute to urinary tract infections with bacteria that promote struvite formation, or when suture material or other intraurocystic foreign material promotes mineralization over its surface, or when treatment/diet administered prior to urolith removal alter urine pH or crystal solubility.

**MINIMIZING RECURRENCE**

**DIAGNOSTIC CONSIDERATIONS**

- Identify causes for the material at the center of urolith(s).
- Culture the urine

**MEDICAL CONSIDERATIONS**

- Follow risk management strategies to minimize the material at the center of urolith(s).
- Culture and susceptibility testing provides the most accurate method for selecting effective antimicrobials.
- Avoid suture entering the lumen of the urinary bladder

**NUTRITIONAL CONSIDERATIONS**

- Follow nutritional recommendations for preventing the mineral at the center of urolith(s).

**MONITORING CONSIDERATIONS**

- Follow monitoring strategies to minimize the material at the center of urolith(s).
- Medical imaging every 6 to 12 months to detect recurrent stones when small to permit their easy removal without surgery.

**Review manufacturer’s therapeutic food literature to determine indications/contraindications. For pets with multiple health concerns, consult a veterinary nutritionist to select an optimal food.**

*Support from Hills Pet Nutrition, veterinarians, and pet owners make our work possible.*