

Nephroliths Composed of Calcium Carbonate-Like Crystals in Three Dogs after Feeding Mycotoxin-Contaminated Diets

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In March 2004, three dead dogs were referred to the College of Veterinary Medicine, Kyungpook National University. Clinically, all dogs showed emaciation, anorexia, depression, hemorrhagic vomiting and diarrhea for 7~10 days before death. The signs had occurred after the dogs were fed mycotoxin-contaminated diets for more than a month. At necropsy, all three dogs had severe renal damage with the same green-yellowish colored nephroliths in the renal pelvis. They also showed systemic hemorrhage and calcification of several organs, which might be induced by uremia associated with renal damage. Microscopically, necrosis, calcification and calculi were detected in the tubules, especially in proximal convoluted tubules, and in the collecting ducts of the kidney. From our research, these findings were supportive of the mycotoxic effect especially on kidneys. Moreover, we first reported on nephroliths composed of calcium carbonate-like crystals in the three dogs after they were fed mycotoxin-contaminated diets.

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