

SECONDARY ACORN (*QUERCUS SP*) POISONING IN TWO DOGS

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Introduction: Two unrelated adult dogs living in the same household showed anorexia, lethargy and vomiting for a few days. The dogs lived in close contact with a pet pig, which had been recently fed a large amount of acorns (*Quercus* sp.). The animals had a habit of eating the pig's faeces. Both dogs were azotaemic and had increased ALT levels. The dogs were diagnosed with acute kidney injury. Despite supportive treatment, they did not improve and were humanely destroyed.

Materials and Methods: At necropsy examination, tissue samples were collected and sections were stained with HE. The liver was collected for pyrogallol (one of the toxic metabolites of acorns) detection.

Results: Both dogs had similar kidney lesions with extensive degeneration, necrosis and multifocal mineralization of the epithelial cells of the proximal tubules. Eosinophilic casts were present multifocally in the tubular lumen. The liver tested positive for pyrogallol.

Conclusions: This is the first reported case of acorn poisoning in dogs and the first reported case of secondary acorn poisoning in any species. Acorn poisoning is mostly seen in cattle, where, as in these cases, acute tubular necrosis is the most prominent lesion. Cattle usually also show multifocal oedema, renal haemorrhages and intratubular haemorrhagic casts, which were not seen in these dogs. The observed tubular mineralization, on the other hand, is usually not reported in bovine cases.

VITAMIN D LEVELS ARE LOWER IN HEALTHY IMMATURE COMMON MARMOSETS (*CALLITHRIX JACCHUS*) THAN IN HEALTHY ADULTS

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Introduction: New world primates such as common marmosets (*Callithrix jacchus*) overexpress the vitamin D response element binding protein, which requires them to have higher circulating vitamin D levels compared with other animals. A few authors previously published serum vitamin D and parathyroid hormone (PTH) levels in small numbers of marmosets, observing wide variations for vitamin D, but none compared large groups of immature marmosets to mature animals.

Materials and Methods: Serum 25-OH-vitamin D levels ($n = 255$) and PTH levels ($n = 243$) were measured in 31 healthy common marmosets between the ages of 5 and 38 months. Of these, respectively 211 and 199 values were from animals <21 months, and 44 were from animals 21 months or older. Common marmosets reach maturity at 21 months.

Results: Vitamin D levels showed a high variation (223.3 ± 109.9 nmol/l) in the total population. Marmosets <21 months had significantly ($P < 0.001$) lower vitamin D levels and a much wider range in values (205.2 ± 102.7 nmol/l) compared with mature animals (330.9 ± 77.76 nmol/l). A high variation in PTH levels (9.3 ± 8.3 pmol/l) was also seen in the total population, but no significant difference was observed between mature and immature animals.

Conclusions: The low vitamin D levels in immature marmosets are remarkable. Vitamin D is necessary for skeletal growth and serum levels are generally higher in (healthy) children than in adults. None of the marmosets in our study population showed skeletal abnormalities, or any other illnesses.