1. J Small Anim Pract. 2016 Jun;57(6):299-304. doi: 10.1111/jsap.12484. Epub 2016 Apr 26.

Adverse urinary effects of allopurinol in dogs with leishmaniasis.

Torres M[1], Pastor J[2], Roura X[2], Tabar MD[3], Espada Y[2], Font A[4], Balasch J[1], Planellas M[2].

Author information:

- [1]Servei d'Urgències i Medecina Interna, Hospital Veterinari Balmes, Carrer Balmes 81, 08008 Barcelona, Spain.
- [2]Hospital Clínic Veterinari and Animal Medicine and Surgery Department, Faculty of Veterinary Medicine, Universitat Autònoma de Barcelona, Campus de la UAB, Plaza Cívica, 08193, Bellaterra, Spain.
- [3]Servicio de Medicina Interna, Centro Policlínico Veterinario Raspeig, Calle Veterinario Manuel Isidro Rodríguez Rodriguez, 17, 03690, San Vicente del Raspeig, Alicante, Spain.
- [4]Servei de Medecina Interna, Hospital Ars Veterinària, Carrer Cardedeu 3, 08023, Barcelona, Spain.

Abstract

OBJECTIVE:

The objective of this study was to describe the adverse effects of allopurinol on the urinary system during treatment of canine leishmaniasis.

METHODS:

Retrospective case series of 42 dogs that developed xanthinuria while receiving allopurinol treatment for leishmaniasis.

RESULTS:

Of 320 dogs diagnosed with leishmaniasis, 42 (13%) developed adverse urinary effects. Thirteen (of 42) dogs (31%) developed xanthinuria, renal mineralisation and urolithiasis; 11 (26·2%) showed xanthinuria with renal mineralisation; 9 (21·4%) had xanthinuria with urolithiasis and 9 (21·4%) developed xanthinuria alone. Urinary clinical signs developed in 19 dogs (45·2%).

CLINICAL SIGNIFICANCE:

This study demonstrates that urolithiasis and renal mineralisation can occur in dogs receiving allopurinol therapy. Dogs receiving therapy should be monitored for the development of urinary adverse effects from the beginning of treatment.

PMID: 27112522 [PubMed - in process]