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## Abstract

Computed tomographic features of canine intramural ureteral stenosis in three dogs.

## Introduction

Stenosis of the intramural portion of the ureter (StIMU) has rarely been reported in dogs<sup>1,2</sup> but has been observed in our excretory urinary computed tomography (EUCT) caseload. Purpose of this study was to investigate the prevalence and EUCT features of StIMU in dogs.

## Methods

Single institutional archives were searched for dogs with EUCT-identified, surgically confirmed StIMU. The urogenital tract was assessed for size, shape, mineralisation, excretion and peristalsis in EUCT.

## Results

Two-hundred-ninety-three EUCT studies were identified. Three dogs met the inclusion criteria, a 1-year-old male Miniature-Schnauzer-Poodle cross with urinary incontinence (case 1), a 3-month-old male Newfoundland dog with haematuria (case 2) and a 4-year-old male Newfoundland dog with pollakiuria (case 3). EUCT examination revealed renal pyelectasia, hydroureter and an abnormal intramural portion of the ureter. Intramural ureteral abnormalities included lack of peristaltic distension, ectopia and aberrant lateral course. Surgical exploration revealed bilateral ureteral stenosis and unilateral ectopia (case 1), bilateral ureteral stenosis and ectopia (case 2) and unilateral stenosis without ectopia (case 3).

## Discussion

Stenosis of the intramural portion of the ureter is rarely seen, with young male dogs overrepresented, and should be included in the differential diagnosis of hydroureter.<sup>1,2,3</sup> This may represent a congenital malformation or a fibrotic inflammatory reaction but is not necessarily associated with ureteral ectopia. Concurrent urinary tract infection needs to be considered as potential cause or result of StIMU. EUCT may be of value for treatment planning. Further investigation for breed predisposition in Newfoundland dogs is warranted.

## References

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