

# Urinalysis results in apparently healthy dogs: Benson and Lucy



**Patients:** Benson (2-year-old, neutered male pug);  
Lucy (1-year-old, spayed female pug)

**Reason for visit:** Benson and Lucy were brought in by their owner, a veterinarian, who was encouraged to perform complete urinalysis on both dogs and participate in UA Day. Both dogs had good appetites, appropriate activity levels, and no clinical signs on presentation.

## Benson's results and assessment

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**BENSON**

2017 MAY 30 MAY 23 MAY 22 MAY 18 2016 JUN 13 2015 JUL 30 JUN 5

Collection	5/18/17 9:49 AM	SediVue Dx Urine Sediment Analyzer	5/18/17 9:48 AM
Color			Free Casts -
Clarity			Dark Yellow -
Specific Gravity			Clear
pH			1.050
Urine Protein			7.0
Glucose			neg
Ketones			neg
Blood / Hemoglobin			neg
Bilirubin			neg
Urobilinogen			norm
Leukocyte Esterase			neg
White Blood Cells	None detected		
Red Blood Cells	38/HPF		
Bacteria, Cocci	None detected		
Bacteria, Rods	Suspect presence <sup>†</sup>		
Squamous Epithelial Cells	None detected		
Non-Squamous Epithelial Cells	None detected		
Hyaline Casts	None detected		
Non-Hyaline Casts	None detected		
Calcium Oxalate Dihydrate Crystals	None detected		
Struvite Crystals	6 - 20 /HPF		
Ammonium Biurate Crystals	None detected		
Bilirubin Crystals	None detected		
Unclassified Crystals	1 - 5 /HPF		

Confirm with one of the following:  
Image review  
SediVue Bacteria Confirmation Kit  
Air-dried, stained cytological preparation ("dry prep")  
Urine culture

### Assessment

Struvite crystalluria and a lower urinary tract infection was confirmed on a stained dry-slide preparation.

# Urinalysis results in apparently healthy dogs: Benson and Lucy (continued)

## Lucy's results and assessment

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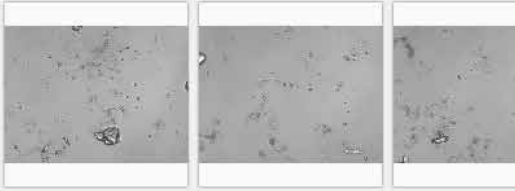
LUCY profile history communications

2017 JUN 1 MAY 18 2016 OCT 26 JUL 18

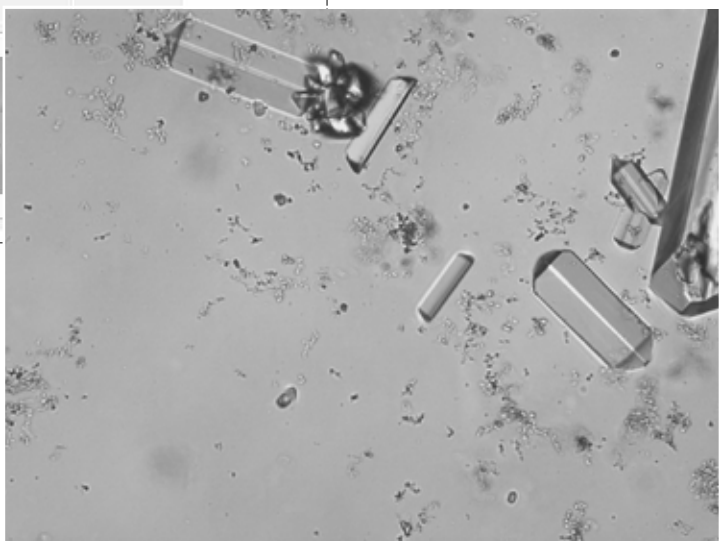
5/18/17 9:54 AM SediVue Dx Urine Sediment Analyzer 5/18/17 9:52 AM

Parameter	Result	Reference Range
Collection	Free Catcl	
Color	Pale Yell	
Clarity	Clear	
Specific Gravity	> 1.050	
pH	8.0	
Urine Protein	neg	
Glucose	neg	
Ketones	neg	
Blood / Hemoglobin	neg	
Bilirubin	neg	
Urobilinogen	1	
Leukocyte Esterase	neg	
White Blood Cells	None detected	
Red Blood Cells	5/HPF	
Bacteria, Cocci	None detected	
Bacteria, Rods	None detected	
Squamous Epithelial Cells	None detected	
Non-Squamous Epithelial Cells	None detected	
Hyaline Casts	None detected	
Non-Hyaline Casts	None detected	
Calcium Oxalate Dihydrate Crystals	None detected	
Struvite Crystals	6 - 20 /HPF	
Amn Biurate Crystals	None detected	
Bilirubin Crystals	None detected	
Unclassified Crystals	None detected	

Images



**Assessment**  
Struvite crystalluria



# Urinalysis results in apparently healthy dogs: Benson and Lucy (continued)

## Lucy and Benson's management plan

- Change diet to reduce formation of struvite crystals.
- Add vitamin C to modify pH of urine and decrease formation of struvite crystals.
- Recheck urinalysis 2 weeks after initiation of diet change and antibiotic therapy.

## Follow-up

Upon recheck, no crystals were found in the urine of either dog, and no trace of bacteria was found in Benson's urine. Another 2 weeks of vitamin C and urinalysis was recommended.

## Key takeaway

Routine urinalyses make early diagnosis and treatment of subclinical urinary tract infection and struvite crystalluria in these seemingly healthy dogs possible.

Note: On UA Day (May 18, 2017), participating hospitals performed free urinalyses using the SediVue Dx® Urine Sediment Analyzer and tested on average more than 6X their normal volume of urine samples.