Canine Proteinuria*

**Investigation**
- Positive reaction for proteinuria on dipstick screening test confirmed with the sulfosalicylic acid turbidimetric test
- Evaluate significance of positive result in light of urine sediment
- Trace or 1+ reaction in a sample $\geq 1.030$

**Diagnosis**
- Inactive urine sediment $\pm$ hyaline casts
- Trace to 4+ reaction in dilute urine or 2–4+ reaction in hypersthenuric urine
- More likely a consequence of hypersthenuria. Recheck in 2–4 weeks; low-level, abnormal renal proteinuria may be present. Consider ERD, ELISA, UPC if proteinuria is persistent.

**Treatment**
- Probable transient, benign, or physiologic proteinuria. Recheck in 2–4 weeks.

**Result**
- Moderate to severe proteinuria (glomerular origin)
- UPC = 0.2–0.5
- Borderline proteinuria
- UPC = 0.5–2
- Mild to moderate proteinuria (either glomerular or tubular in origin)
- UPC > 2
- Moderate to severe proteinuria (glomerular origin)

*Diagnostic tree for feline proteinuria similar except the dipstick and sulfosalicylic acid turbidimetric tests are inaccurate/unreliable; screen with ERD, ELISA, or UPC.

ACE-I = angiotensin-converting enzyme inhibitor; ELISA = enzyme-linked immunosorbent assay; ERD = early renal damage test (heska.com); R/O = rule out; UPC = urine protein–creatinine ratio.

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**UPC**
- UPC = 0.5–2
- Mild to moderate proteinuria (either glomerular or tubular in origin)

**Blood Pressure**
- Normotensive
- Hypertensive

**Perform “antigen hunt”**
- If proteinuria persists
- Treat underlying disorder

**Consider ACE-I treatment and renal biopsy**
- If proteinuria persists
- If proteinuria persists

**Diagnosis**
- R/O other potential causes (eg, Cushing’s disease); treat hypertension and recheck in 2–4 weeks

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**UPC**
- UPC = 0.2–0.5
- Borderline proteinuria

**Obtain UPC**
- If proteinuria persists

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**UPC**
- UPC < 0.2
- Borderline proteinuria

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**UPC**
- UPC > 2
- Moderate to severe proteinuria (glomerular origin)

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**UPC**
- UPC < 0.2
- Borderline proteinuria

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**UPC**
- UPC > 2
- Moderate to severe proteinuria (glomerular origin)