Polyuria & Polydipsia in Dogs & Cats

**Polydipsia**
- Increased water intake (>80–100 mL/kg q24h)
  - Osmotic factors—increased plasma osmolality
  - Nonosmotic factors—hypotension, hyperthermia, hypovolemia, pain, drugs

**Polyuria**
- Increased urine production (>50 mL/kg q24h)
- Assess signalment, history, examination findings, and MDB (CBC, serum biochemistry profile, complete urinalysis, urine culture)

**Abnormalities found?**
- Yes (most common)
- No (least common)

**Pursue appropriate diagnostics, including:**
- Thoracic/abdominal/renal imaging
- Thyroid/adrenal function testing
- Bile acids
- Leptospira titers
- Hyperadrenocorticism/Cushing’s disease testing

**Treat as necessary**

**Urine Concentration Levels**
- Hyposthenuria = <1.008
- Isosthenuria = 1.008–1.012
- Minimally concentrated = 1.012–1.029 (dogs), 1.012–1.039 (cats)
- Hypersthenuria = ≥1.030 (dogs), ≥1.040 (cats)

*Early-morning urine is best to assess concentrating ability

**Rule out otherwise silent Cushing’s disease**

**Rule out CKD:**
- Stage 1 or early stage 2
- Evaluate further renal imaging, UP:C, blood pressure, GFR
**Test can be harmful to patient, as it must create a stimulus to concentrate urine (i.e., mild dehydration).

ADH = antidiuretic hormone, AKI = acute kidney injury, CKD = chronic kidney disease, GFR = glomerular filtration rate, MDB = minimum database, PUPD = polyuria/polydipsia, UP:C = urine protein:creatinine ratio, USG = urine specific gravity.