

# Proteinuria in Cats

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Following are differential diagnoses for cats presented with proteinuria.

## Prerenal

- ▶ Hemoglobinuria
- ▶ Myoglobinuria
- ▶ Light chain immunoglobulins (multiple myeloma, lymphoma)

## Renal

- ▶ Functional or physiologic
  - Congestive heart failure
  - Strenuous exercise
  - Fever
  - Seizure
  - Exposure to extreme temperatures
- ▶ Glomerular
  - Infectious
    - Bacterial (eg, chronic bacterial infection, mycoplasmal polyarthritis, endocarditis)
    - Viral (eg, FIV, feline infectious peritonitis, FeLV)
    - Protozoal (eg, toxoplasmosis)
    - Fungal (eg, cryptococcosis, other systemic fungal infection)
  - Inflammatory
    - Acute pancreatitis
    - Cholangiohepatitis
    - Chronic progressive polyarthritis

- Systemic lupus erythematosus
- Other immune-mediated diseases
- Neoplastic
  - Leukemia
  - Lymphoma
  - Mastocytosis
- Miscellaneous
  - Acromegaly
  - Drug reactions
  - Diabetes mellitus
  - Corticosteroids (endogenous/spontaneous hyperadrenocorticism and exogenous)
  - Hyperthyroidism
  - Systemic hypertension
- Familial
  - Membranous nephropathy
  - Amyloidosis (Abyssinian, Siamese)
- ▶ Tubulointerstitial
  - Chronic kidney disease
  - Acute kidney injury
    - Toxins (eg, NSAIDs, acetaminophen, ethylene glycol, lilies [*Lilium* and *Heimerocallis* spp], heavy metal ingestion [eg, lead, mercury, arsenic, thallium], insect or snake bite)
    - Hypotension

## Postrenal

- ▶ Bacterial cystitis
- ▶ Idiopathic cystitis/FLUTD
- ▶ Urolithiasis
- ▶ Neoplasia (eg, urothelial carcinoma, other)
- ▶ Prostatitis (rare in cats)
- ▶ Vaginitis
- ▶ Pyometra

## References

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FLUTD = feline lower urinary tract disease