

Chronic hematuria in neutered dogs

Recommended Diagnostics

- Physical exam: Retract prepuce or perform vaginal exam to look for lesions/foreign bodies/masses. Perform rectal exam to identify uroliths or irregular, painful urethra, which is suggestive of neoplasia or granulomatous urethritis. Monitor urination for straining, timing of hematuria, and compare voided vs cystocentesis sample to determine if hemorrhage from bladder (after confirming no coagulopathy).
- Confirm hematuria and rule out myoglobinuria/hemoglobinuria by centrifugation of urine sample
- CBC/Serum chemistry: Urinary tract bleeding may be caused if platelets <25,000 to 50,000.
- Coagulation panel
- Buccal mucosal bleeding time to test for platelet dysfunction such as von Willebrand's disease
- Urinalysis: presence of RBC casts and/or moderate to severe proteinuria suggest glomerular disease such as glomerulonephritis. Presence of ova likely consistent with *Dioctophyma renale* or *Capillaria plica*
- Consider testing for 4Dx testing and leptospirosis to look for underlying causes of glomerulonephritis.
- Abdominal radiographs to look for uroliths. Include pelvic urethra view with hind limbs pulled caudally to visualize penile/pelvic urethra.
- Thoracic radiographs to look for metastatic neoplasia, particularly from hemangiosarcoma or adenocarcinoma
- Traumatic catheterization if urethral lesion noted or if bladder mass present
- Urine histoplasmosis/blastomycosis antigen test to MiraVista labs

Other considerations

Rule out ingestion of cyclophosphamide, which can cause sterile hemorrhagic cystitis.

Idiopathic renal hematuria occurs most commonly in young to middle-aged large breed dogs.

Welsh Corgis are predisposed to renal telangiectasia

Treatment

- Antibiotics based on urine culture, ideally. If culture not affordable, TMS, amoxicillin, or cephalexin trial recommended for 2 weeks. If renal involvement suspected, treat with a fluoroquinolone for 6 weeks.
- Doxycycline (5 mg/kg PO BID x 3 weeks) for leptospirosis or rickettsial diseases
- Fenbendazole 50 mg/kg PO daily for 3 days if ova seen on urinalysis

-S/D or SO dietary trial for possible struvite urolithiasis, especially in predisposed breeds.

-Piroxicam(0.3 mg/kg PO daily with a meal) if TCC or another carcinoma diagnosed. May also add carboplatin chemotherapy or oral chlorambucil.

-To potentially minimize hemorrhage: Yunnan Baiyao Chinese herb: **Use red pill in box for acute bleeding*

< 15 kg = 250 mg PO BID

15–30 kg = 500 mg PO BID

>30 kg = 500 mg PO TID

