Urology
Patient Referral Guide

Kootenay Urology
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A standard referral letter is preferred.
Letter must be accompanied with patient medical history, current medications, and allergies.

Common reasons for urology referral and things to consider in the patient evaluation

HEMATURIA (PAINLESS)	
Gross Hematuria (GH)	Painless blood in the urinary stream may be associated with malignancy in up to 30% of patients. Malignancy is assumed unless proven otherwise. All patients with history for painless GH require urologic assessment.
	Required Investigations: • CBC, electrolytes, Cr/eGFR, INR, PTT • Urine analysis and culture • "CT IVP" if adequate renal function (eGFR >60ml/min) ➔ Renal US acceptable if poor renal function or allergy to IV contrast
Asymptomatic Microscopic Hematuria (AMH)	This is defined as 2 consecutive urine microscopy samples showing >2 red blood cells per high powered field on microscopy. **NOTE**: BLOOD ON URINE DIPSTICK MUST BE CONFIRMED BY URINE MICROSCOPY
	Required Investigations: • Urine analysis and culture • Urine Microscopy x 2: Two consecutive results performed more than 1 week apart showing >2 RBC/HPF ➔ Evidence of proteinuria and/or active sediment (e.g., red blood cell casts) should prompt referral to nephrology • Renal US
NEPHROLITHIASIS	
	Required Investigations: • "Low Dose, non-contrast CT KUB" should be first line imaging for patients with suspected renal colic or nephrolithiasis. Radiation dose with CT KUB is low, roughly equivalent to Abdominal 3-View plain film. Contrast enhanced CT of the abdomen involves higher dose of radiation and is NOT needed in evaluation of stone disease. • Exceptions where Renal US or KUB Plain Film may be appropriate: ○ Pregnancy ○ Young pediatric patients ○ Ongoing surveillance of asymptomatic, non-obstructing stones ○ CT unavailable • Additional investigations should include basic metabolic assessment: ○ UA to include urine pH ○ CBC, lytes, BUN, Cr/eGFR, Ca, Mg, PO ○ Consider PTH if elevated serum Ca ○ If available, send stone for analysis

URINARY TRACT INFECTION	
Women	Recurrent UTI (rUTI) is defined as 2 episodes of acute bacterial cystitis within 6 months, or 3 episodes within 1 year. Acute bacterial cystitis is defined as a culture-proven infection of the urinary tract with a bacterial pathogen AND acute-onset symptoms such as dysuria in conjunction with variable degrees of increased urinary urgency and frequency, hematuria, and new or worsening incontinence. Asymptomatic bacteriuria is the presence of bacteria in the urine that causes no symptoms, and antibiotics should not routinely be prescribed.
	Urologic review for women with uncomplicated rUTI is not routinely necessary. Prior to referral physicians should ensure the following recommendations have been implemented: • Patients should be compliant with adequate fluid hydration and timed voiding at least every 2-3 hours • Constipation is a significant risk factor for rUTI. Any component for constipation should be addressed prior to referral • Patient should be taking D-mannose • Vaginal estrogen should be recommended to peri- and post-menopausal women if there is no contraindication • For women who report sexual activity as a trigger for rUTI consideration should be given to peri-coital prophylaxis with nitrofurantoin or TMP-SMX
	Urology referral is suggested if: 1. Risk factor(s) for complicated UTI is present (prior urologic surgery; gross hematuria after resolution of infection; obstructive voiding symptoms; urea-splitting bacteria like proteus, klebsiella, pseudomonas; bacterial persistence; prior abdominopelvic surgery; diabetes; immune compromised; pneumaturia/fecaluria; pyelonephritis of febrile UTI 2. Surgically correctable cause is suspected (e.g., Urethral stenosis) 3. Diagnosis of UTI as cause for lower urinary tract symptoms is uncertain (e.g., Suspect CIS)
	Required Investigations: • UA • Urine cultures obtained while symptomatic • Consider KUB US to include PVR if concern for obstructive symptoms
Men	Urinary tract infections in men are, by definition, complicated and require urologic assessment.
	Required Investigations: • UA, Urine culture(s) • KUB Ultrasound to include PVR and prostate volume Note: PSA should not be obtained around the time of suspected UTI, as infection may falsely elevate this value. PSA can be obtained 6-8 weeks after resolution of infection.
LOWER URINARY TRACT SYMPTOMS (LUTS)	
Women	Required investigations: • UA, Urine culture • Consider KUB US to include PVR if significant obstructive symptoms
Men	Required investigations: • UA, Urine culture • PSA • Consider validated questionnaire (IPSS) • Consider trial of alpha blocker therapy if clinical findings for BPH on exam prior to urologic referral

ERECTILE DYSFUNCTION	
	Required investigations: • HbA1c vs Fasting glucose, CBC, lytes, BUN, Cr, lipids • Consider validated questionnaire: Sexual Health Inventory for Men (SHIM) • Consider serum total testosterone if evidence for hypogonadism
ELEVATED PSA & ABNORMAL PROSTATE EXAM	
	Required investigations: • UA • PSA (ideally 2 values within 1 year) • Consider validated questionnaires: IPSS, SHIM
SCROTAL CONCERNS	
	Required investigations: • UA • Scrotal US • Consider serum tumor markers only if concern for testis tumor (B-hCG, alpha fetoprotein, LDH)
PHIMOSIS	
	No investigations needed. Consider 6-8 week trial of topical steroid such as betamethasone valerate 0.1% applied TID with gentle retraction of the foreskin prior to referral.
RENAL MASS & RENAL CYSTS	
	All solid renal tumors and complex renal cysts should undergo urologic assessment. Simple renal cysts (Bosniak class I and II) do not require urologic assessment or routine surveillance.
	Required investigations: • CBC, lytes, BUN, Cr/eGFR • Order “CT with Renal Mass Protocol” if eGFR >60ml/min
ADRENAL MASS	
	Adrenal incidentalomas (AI) are serendipitously discovered lesions >1cm found on radiologic exam for unrelated indication. AI on imaging that are clearly benign do not require further investigation. If there are indeterminate features, or if the lesion is >4cm, then further investigation and urologic referral should be performed.
	Required investigations: • CT/MRI imaging • CBC, lytes, BUN, Cr/eGFR • Consider low dose 1mg dexamethasone suppression test • Consider 24hour urine fractionated metanephrines and catecholamines • Consider plasma aldosterone renin ratio if there is history for hypertension
NEUROGENIC BLADDER	
	This encompasses patient with voiding dysfunction on the basis for neurologic condition (e.g., Spinal cord injury, MS, stroke, etc.). Patients with neurogenic bladder should be assessed annually with renal US, with consideration for urologic review for cystoscopy +/- urodynamic testing every 2 years, or if there is a significant change in voiding symptoms.
	Required investigations: • Renal US • UA and recent urine cultures