

Nephrology Referral Guidelines

Definitions:

1. CKD is decreased kidney function to an eGFR of $< 60\text{mL/min}$ on two or more occasions and sustained for **three or more months**
2. CKD 3 is an eGFR of $30\text{-}59\text{mL/min}$ (3a is $45\text{-}59\text{mL/min}$, 3b is $30\text{-}44\text{ mL/min}$)
3. CKD 4 is an eGFR of $15\text{-}29\text{mL/min}$
4. CKD 5 is an eGFR of $< 15\text{mL/min}$
5. Acute kidney injury is an acute rise in creatinine by $\geq 0.3\text{mg/dL}$ or ≥ 1.5 times baseline for less than 3 months (please mark if both CKD and AKI).
6. Resistant hypertension is blood pressure $> 140/90$ despite concurrent use of the maximum dose of three different classes of anti-hypertensives (these should be a diuretic, ACEi or ARB, and a dihydropyridine calcium channel blocker, unless contra-indications against or indications for a different class of medication)

Reasons for Referral:

1. Stage 3b or higher CKD (An eGFR $< 45\text{ mL/min}$)
2. Urine albumin/protein to creatinine ratio $\geq 300\text{ mg/g}$
3. Acute kidney injury without clear pre-renal or post-renal etiology. Please stop offending medications (ACEi/ARB/NSAIDs/Bactrim/diuretics) and/or increase fluid intake and repeat labs within two weeks prior to referral. All patients with AKI should have repeat creatinine checked at a regular interval (q1-4 weeks) determined by PCP until nephrology appointment.
4. Unknown cause of CKD
5. Microscopic hematuria that is not secondary to urologic causes
6. A decline in eGFR of more than 25% in < 6 months, or a sustained decline of greater than $5\text{mL/min}/1.73\text{m}^2/\text{year}$
7. Suspected complications of CKD such as anemia or bone and mineral metabolism abnormalities
8. Serum potassium greater than 5.5 meq/L , not on potassium supplements
9. Serum potassium less than 3, not on diuretics and not with chronic diarrhea

10. Resistant hypertension
11. Recurrent nephrolithiasis (not for first occurrence)
12. Hereditary kidney disease, such as polycystic kidney disease, Alport syndrome, etc.
13. Sustained hyponatremia < 130 without known cause

Reasons to consider Emergency Department evaluation:

1. Acute kidney injury stage 2 or higher (creatinine ≥ 2 times higher than baseline)
2. Hyperkalemia $> 6\text{meq/L}$
3. Signs/symptoms of uremia
4. Sodium < 125 , depending on the circumstances, definitely < 120

Call our office, or mark as Urgent/For physician review:

1. Proteinuria $> 3\text{mg}$
2. Reasons for referral: AKI, microscopic hematuria WITH proteinuria, a decline in eGFR of $> 25\%$ in < 6 months, serum potassium > 5.5
3. An eGFR $< 20\text{mL/min}$

Not appropriate for Nephrology Referral:

1. Abnormalities on a renal ultrasound that are not polycystic kidney disease, medullary sponge kidney or nephrocalcinosis (i.e. a single mass, benign cysts, echogenic kidneys in the setting of normal creatinine, etc.)
2. Flank pain
3. Hyponatremia in the setting of cirrhosis or heart failure, without other indication for nephrology referral.
4. Gross hematuria without initial urologic evaluation
5. One episode of a kidney stone
6. Hypokalemia in the setting of diuretic use or chronic diarrhea/ostomy losses

Recommendations for treatment:

1. In all diabetics with an eGFR of $> 45\text{ mL/min}$ and microalbuminuria $< 300\text{mg/gm}$, please be sure they are on and ACEi or ARB, unless they have contra-

indications. Blood pressure goal is < 130/80 and Hgb A1C goal is < 7%.
Avoidance of all NSAIDs.