



Guidelines for referrals

Below is guidance to follow when referring a patient for a consultation with Children's Healthcare of Atlanta Nephrology, including our Hypertension Clinic. These are meant to be general recommendations. If you have specific questions, call **404-785-DOCS (3627)** and ask to speak with the on-call nephrologist. You will almost always be speaking directly with an attending nephrologist.

Conditions treated

- Congenital kidney problems
- Kidney failure
- Kidney stones
- Nephrotic syndrome
- Proteinuria
- Cystic kidney disease
- Glomerulonephritis
- Hematuria
- Hemolytic uremic syndrome
- Hypertension
- Enuresis
- Electrolyte abnormalities
- Urinary tract infections

Urgent referrals

If you feel your patient needs to be seen immediately, call **404-785-DOCS (3627)**. Some of these patients may warrant an Emergency Department evaluation or hospitalization. Generally, conditions that may warrant an Emergency Department evaluation, hospitalization or an urgent initial outpatient visit include, but are not limited to:

- **Nephrotic syndrome:** Urgent clinic if normal renal function and absence of severe edema; else, Emergency Department
- **Severe hypertension**
 - Stage 2 hypertension: Urgent clinic
 - Symptomatic hypertension or BP > 30 mm Hg above the 95% (>160/100 in adolescent): Discuss with nephrologist
- **Acute kidney injury with electrolyte abnormalities:** Go to the nearest Emergency Department
- **Acute glomerulonephritis:** Discuss with nephrologist
- **HSP with significant proteinuria:** Urgent clinic visit if renal function is normal; else, discuss with nephrologist; obtain random or first AM (preferred) urine protein/creatinine ratio, renal function panel* and microscopic urinalysis
- **Proteinuria with decreased kidney function:** Discuss with nephrologist
- **Gross hematuria:** Discuss with nephrologist if findings of glomerulonephritis (elevated BP, elevated creatinine or hypoalbuminemia); consider these labs if suspect glomerulonephritis: renal function panel*, urine protein/creatinine ratio C3, C4 and ANA; consider urine culture if fever, dysuria, frequency; consider ultrasound if significant pain, may need urgent evaluation (urology or Emergency Department)
- **Severe edema:** Inability to open eyes or walk due to edema, difficulty breathing due to abdominal distension, GU swelling causing skin irritation

Lab tests and ultrasound results that do not need a referral

- Elevated BUN/creatinine ratio: Normally elevated in young children due to low creatinine levels
- Elevated BUN and normal creatinine: Mildly elevated BUN is rarely a concern if creatinine is normal
- Elevated urine protein if urine protein/creatinine ratio is normal (< 0.2 mg/mg or <200 mg/g)
- Isolated urine crystals, unless cystine or 2,8-dihydroxyadenine crystals
- Kidney length asymmetry if both kidneys are normal in length
- Duplicated collecting system is a normal variant unless associated with hydronephrosis, urine leaking due to ectopic ureter or dysplasia

Conditions that should be referred to other specialists

- Hydronephrosis → urology
- Symptomatic kidney stones (inability to tolerate PO intake, severe pain, rigor, inability to urinate) require an evaluation in the ED and a discussion with urology.
- Terminal (end-of-stream) visible hematuria → urology

Conditions where most referrals can be avoided with basic testing in your office

- **Microscopic hematuria:** Only refer if red blood cells are confirmed by microscopy on at least 2 to 3 occasions; consider kidney ultrasound prior to referral if hematuria is persistent.
 - If blood is detected on UA, send urine for microscopy to confirm red blood cells
 - Dipstick tests can turn positive with myoglobin or hemoglobin in the urine
 - Microscopic hematuria: > 5 RBCs per high powered field (hpf) on microscopy
- **Proteinuria:** Only refer after screening for benign orthostatic proteinuria by performing a first AM urine protein/creatinine ratio and demonstrating an elevated value (> 0.2 mg/mg or >200 mg/g). If non-orthostatic proteinuria, consider renal function panel*, cholesterol, C3, C4 and ANA prior to referral.
 - For protein that is detected on a urine sample, obtain a first morning urine sample to repeat the UA and send for a urine protein to creatinine ratio
- **Hypertension:** Confirm by obtaining auscultatory values using an appropriately sized cuff. Many overweight or muscular teenagers need a large adult cuff. For stage 1 hypertension, confirm 1 to 2 weeks before referring. Please refer patients with hypertension without associated significant kidney disease to our Nephrology Hypertension Clinic that has ambulatory blood pressure monitoring (ABPM) and nutritional support for patients.

Locations

Our main clinic is at the Center for Advanced Pediatrics with additional outreach clinics in metro Atlanta.

- **Center for Advanced Pediatrics:** 2174 North Druid Hills Road NE, Atlanta, GA 30329
- **Children's at Northpoint:** 3795 Mansell Road, Alpharetta, GA 30022
- **Children's at Satellite Boulevard:** 2660 Satellite Boulevard, Duluth, GA 30096
- **Children's at Town Center Outpatient Care Center:** 605 Big Shanty Road, Kennesaw, GA 30144

Tell your patient families to ask to be seen in the clinic that is most convenient for them. Note: Outreach clinics may not be able to accommodate urgent appointments since some are only held monthly or bi-monthly.

Referrals and medical records

- **Fax:** Fax referral requests to 404-785-9111.
- **Online:** Complete our online referral form at choa.org/referral.
- **accessCHOA:** Send referrals through [accessCHOA](http://accesschoa.com).

Make sure all appropriate records are faxed to our office prior to the patient's visit, including office visit notes, imaging studies (i.e. kidney ultrasound) and lab results. If lab results are pending at the time the records are faxed, send the complete results when available.

Note: In case of an urgent concern or emergency, call 911 or advise the family to go to the nearest emergency department right away.

**Renal function panel includes electrolytes, BUN, creatinine, albumin and phosphorus. CMP is an alternative, but it does not include phosphorus.*

