A Guide for Referring Physicians

The Pediatric Urology team at Cincinnati Children's Hospital Medical Center offers the following referral recommendations for common urology disorders. If you have additional questions, please contact the Division of Pediatric Urology at 513-636-4975 or 1-800-344-2462, extension 4975.

Acute Scrotal Pain / Swelling

Any child with acute onset of scrotal pain should be suspected of having testicular torsion. The single most important step you can take is to educate the family to seek immediate attention for acute onset of testicular pain or swelling within six hours of onset of symptoms. Early intervention is critical to avoid permanent damage to the testis.

Unless your office exam rules out testicular torsion, refer any patient with acute onset scrotal pain to the Cincinnati Children's emergency department for immediate urologic evaluation.

Not all cases of acute scrotal pain are torsion of the testis. Other common problems are torsion of the appendix testis, epididymitis, incarcerated hernia or acute hydrocele of the spermatic cord or testis – which may not require emergency consultation.

Bladder Tumors

Bladder tumors are rare in children, but do exist. If a tumor is found on an ultrasound, immediately contact a pediatric urologist at Cincinnati Children's for a consultation, call Physician Priority Link at 513-636-7997 or 1-888-636-7997.

Circumcision

Elective circumcisions (outside the newborn period) are performed around 6 to 12 months of age. Therefore we recommend evaluation at age 6 months.

Neonates who were circumcised at birth should be seen seven to 10 days later in the primary care physician's office. At this visit, the infant should be checked for the development of adhesions between the glans and the foreskin. These adhesions should be lysed in the office at that time. Children with adhesions that cannot be lysed in the office, or with a sub-optimal initial circumcision, may be seen at age 6 to 12 months for possible surgical revision.

Children who are uncircumcised should not have their foreskin retracted until 3 to 4 years of age. If adhesions still exist when the child is 5 years old, offer the option of circumcision or recommend waiting until puberty to see if the adhesions resolve spontaneously.
**Hematuria**

Children with microscopic hematuria should have an ultrasound, urinalysis, urine culture, CBC and a renal profile. A good family history should also be obtained. Other family members, including parents, should be screened for microscopic hematuria. If all the testing is normal, patients with microscopic hematuria without proteinuria will require no further evaluation.

A follow-up urinalysis to rule out proteinuria and microscopic hematuria should be done yearly with these patients. Patients with abnormal ultrasounds, hydronephrosis and renal calculi, for example, should be seen by a urologist.

Any child with gross hematuria should have an ultrasound of the kidneys and bladder, a urinalysis and urine culture, a CBC, a renal profile and a serum protein profile, including complement C3 and C4. A pediatric urologist should do the first evaluation of a patient with gross hematuria if the hematuria occurs at the initial or terminal stage of urination. A urologist also should evaluate the patient if the hematuria is accompanied by voiding symptoms or if the renal ultrasound is abnormal. A pediatric nephrologist should evaluate all other patients with gross hematuria. Patients with an abnormal serum protein profile or documented proteinuria also should be seen by a pediatric nephrologist for further evaluation.

To contact the Division of Nephrology at Cincinnati Children's, call 513-636-4531 or 1-800-344-2462 ext. 4531.

**Hernia / Hydrocele**

A child with a true inguinal hernia should be referred at the time of diagnosis. Many newborns are born with a hydrocele that resolves spontaneously between 6 to 12 months of age. A referral is not necessary unless you are concerned about an associated hernia, for example, thickened cord, a hydrocele that fluctuates in size or is very tense.

**Hypospadias**

This disorder occurs frequently (one in 600-1,000 live births). Because most hypospadias are repaired in children at 6 to 8 months of age, the optimal time to refer is at age 4 to 5 months. This allows for surgery scheduling with the initial pre-op consultation.

Any patient with a possible intersex disorder, such as ambiguous genitalia, both testes absent or those with both hypospadias and undescended testicles, should be seen immediately.

**Prenatal Hydronephrosis**

Since prenatal ultrasounds are performed in many pregnancies, it is becoming more common to diagnose renal abnormalities prenatally. In general, nothing should be done until birth, unless the fetus has bilateral hydronephrosis and oligohydramnios. In that case, immediately seek a phone consultation with a urologist. After the child is born, an X-ray VCUG and ultrasound should be obtained as soon as possible. Please note: If the prenatal hydronephrosis is a mild case and the baby is asymptomatic, then the Voiding Cystourethrogram (VCUG) may not be required. Please contact one of our pediatric urologists for help. Most other prenatal conditions are evaluated on an outpatient basis.
A renal ultrasound should be done after delivery to confirm the diagnosis. A patient with a unilateral abnormality may be discharged per routine, and referred at that time for further work-up.

If your patient is delivered at a hospital unable to perform reasonable neonatal ultrasounds, we recommend an early VCUG and ultrasound at Cincinnati Children's at the time of normal discharge. You can schedule the test by calling our office at 513-636-4975 or 1-800-344-2462 ext. 4975.

Undescended Testicle

A child with an undescended testicle (UDT) usually presents as a newborn. If a testis is going to descend, it usually does by 6 months of age. Recent evidence suggests that UDT should be repaired around 6 to 8 months of age. Therefore we recommend that a child with a UDT be referred around 6 months of age.

If a symptomatic hernia is associated with the UDT, the child should be referred immediately. Occasionally children with retractile testes will develop a true UDT. These patients should be evaluated at the time of the diagnosis of UDT.

Urinary Tract Infections

All males with a documented urinary tract infection (UTI) should undergo an ultrasound of the kidneys and bladder and an X-ray cystogram. All females under the age of 3 years with a documented UTI require an X-ray cystogram and renal ultrasound.

Any female with persistent urinary symptoms or with an abnormal ultrasound, a hydronephrosis/duplication anomaly, for example, should also have an X-ray cystogram.

Nuclear cystography is performed only as screening in older girls with no voiding symptoms and for follow-up testing in males and females.

It is appropriate to individualize the decision for a VCUG, and /or to discuss the case with the pediatric urologist ahead of time. To immediately contact a pediatric urologist at Cincinnati Children's for a consultation, call Physician Priority Link at 513-636-7997 or 1-888-636-7997.

Vesicoureteral Reflux

During follow-up of children with reflux, we recommend TMP-SMZ (Bactrim, Septra) at 1-2 mg/kg Trimethoprim or Furadantoin/Macrodantin 1-2 mg/kg at bedtime. Young infants should be given Amoxicillin 10 mg/kg for suppression. Follow-up of children with reflux should include a urine culture (mid-stream or sterile bag) every two months. A CBC with differential should be obtained every 4-6 months while on bactrim prophylaxis.

Positive urine cultures or suspected UTI should always be documented by catheterized culture. If your office is not set up to do this, you can obtain a catheterized culture at Cincinnati Children's.

Follow-up evaluation should include nuclear cystogram and ultrasound at yearly intervals. Babies less than 1 year of age should have a repeat study in six months. Patients with higher grades of reflux (III, IV or V), renal damage, poor renal growth, duplication, voiding dysfunction or breakthrough infection (UTI on suppression therapy) should be considered for early urologic evaluation.
Voiding Concerns

Enuresis is common. Daytime wetting in children 4 to 5 years of age and older may indicate a serious problem and may require referral to the Healthy Bladder Clinic.

Children with nocturnal enuresis alone should be considered for referral if they are older than 7 to 8 years of age, and the child and parents are motivated toward therapy. Children with urinary symptoms such as frequency, urgency and urge incontinence also should be referred.

In the Healthy Bladder Clinic, patients are evaluated and managed by pediatric nurse practitioners or pediatric nephrologist who have the training and experience to care for these children.