tube defects to the subtle abnormal shape or position of the outer ear. Failure to thrive in children may be a sign of impaired renal function.

Many of the clinical manifestations of renal disease are common to a variety of childhood disorders, but their presence is an indication to obtain further information from the child's history, family history, and laboratory studies as part of a complete physical examination. Suspected renal disease can be further evaluated by means of radiographic studies and renal biopsy (Table 26-1).

TABLE 26-1
Radiologic and Other Tests of Urinary System Function

Test	Procedure	Purpose	Comments and Nursing Responsibilities
Urine culture and sensitivity	Collection of sterile specimen	Determines presence of pathogens and the drugs to which they are sensitive	Send specimen to laboratory immediately after collection Catheterization, clean-catch, or suprapubic specimen
Renal and bladder ultrasonography	Transmission of ultrasonic waves through renal parenchyma, along ureteral course, and over bladder	Allows visualization of renal parenchyma and renal pelvis without exposure to external-beam radiation or radioactive isotopes Visualization of dilated ureters and bladder wall also possible Can show renal cysts and stones, though less sensitive than CT Doppler ultrasonography can be used to evaluate renal vascular flow	Noninvasive procedure
Testicular (scrotal) ultrasonography	Transmission of ultrasonic waves through scrotal contents and testis	Allows visualization of scrotal contents, including testis Testicular ultrasonography is used to identify masses, and Doppler-enhanced ultrasonography is used to differentiate hyperemia of epididymo-orchitis from ischemia or	Noninvasive procedure