

## **Kidney Stones (Nephrolithiasis)**

Kidney stones occur when chemicals in the urine become concentrated to the point that solid crystals form. These crystals deposits vary in size. Most stones in the pediatric population remain in the kidney and are painless. Some stones may migrate from the kidney into the ureter towards the bladder. Stones that become lodged in the ureter can be associated with severe abdominal or back pain, nausea, and blood in the urine.

The size of the stone usually determines if a child will be able to pass the stone without surgical intervention. Kidney stones are diagnosed through use of either an ultrasound, plain film X-ray (KUB) or a non-contrast CT scan. Medication is often prescribed to relieve severe pain and help with passage of the stone.

Surgical intervention is reserved for patients who have significantly sized stones not likely to pass given their large size, uncontrolled pain not relieved by medication and fluids, and patients with an infection.