



Kidney Stones

Stones in the urinary tract are quite common. It is estimated that between 5% and 10% of adults will have a stone during their life times. They are almost 2-3 times more likely in men than in women.

The cause of the stones is unknown but heat exposure and dehydration are predisposing factors. In women, weight and an increased body mass index (BMI) are also predisposing factors. Increased calcium in the urine tends to lead to stone formation. 75% of the stones have calcium usually in the form of calcium oxalate. 7%-10% of the stones are uric acid stones.

The usual symptoms of stones are pain and blood in the urine. Sometimes the blood can only be seen with the microscope. Other symptoms include obstruction of urine and urinary tract infection.

During pregnancy, the most common cause of a non-pregnancy related hospital admission is pain from a kidney stone. Kidney stones occur in about 1/200 to 1/500 pregnant women. Pregnant women have higher urinary calcium and uric acid so they tend to form more stones. The ureters (tubes from kidney to bladder) dilate during pregnancy allowing kidney stones to travel into the ureter causing pain. Patients may also have increased urinary tract infections when stones are present. Pregnant women with stones are more likely to have preterm labor. Stones are more common in older pregnant women. Between 50-80% of pregnant patients will pass the stone when given hydration and analgesics. If the stone does not pass and symptoms persist, surgery may be necessary.

Ultrasound is the procedure of choice to diagnose kidney stones. A limited x-ray study called an IVP may be needed to make a diagnosis.