

considered necessary because the precipitation of uric acid is unlikely at a higher urine pH. A distinctive feature of uric acid stones is their radiolucency– Impaction along the genitourinary tract is a serious complication of renal calculi and can cause several physiologic changes. Surgical intervention can be performed on an outpatient basis, provided the patient is able to tolerate oral intake and has adequate pain control unless the stone is infected, renal damage is considerable, there are bilateral obstructing stones, or there is obstruction of a solitary or transplanted kidney. Once obstruction occurs, a rapid redistribution of renal blood flow results in a decrease in the glomerular filtration rate (GFR). Subsequent infectious complications include pyelonephritis, perinephric abscess, and gram–negative bacterial sepsis. As glomerular and tubular function decrease, renal excretion shifts to the unaffected kidney. The stone behaves as a foreign body and leads to stasis and obstruction, decreasing host resistance and increasing the incidence of infection. Up to 95% of stones larger than 8 mm become impacted along the genitourinary tract, and lithotripsy or surgical removal is usually required. Obstruction also causes a rapid decrease in ureteral peristaltic activity. 85.4).