

Evidence Discussion – Suspected Renal/Ureteral Stone(s) (AB-4.1)

Noncontrast CT (NCCT) is the imaging study of choice for initial evaluation of patients with acute onset of flank pain and suspicion of stone disease without known prior stone disease. NCCT can reliably characterize the location and size of an offending ureteral calculus, identify complications, and diagnose alternative etiologies of abdominal pain. Although less sensitive in the detection of stones, ultrasound may have a role in evaluating for signs of obstruction. Radiography potentially has a role, although has been shown to be less sensitive than NCCT. For patients with known disease and recurrent symptoms of urolithiasis, NCCT remains the test of choice for evaluation. In pregnancy, given radiation concerns, ultrasound is recommended as the initial modality of choice with potential role for noncontrast MRI. In scenarios where stone disease suspected and initial NCCT is inconclusive, contrast-enhanced imaging, either with MRI or CT/CT urogram may be appropriate.

References

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