

Incidental Ultrasound Findings on Abdominal/KUB Ultrasounds	
Kidney Size	Small kidneys (<8cm) are common in CKD and this is not a reason alone for referral (unless biochemical criteria are met). Obstructed kidneys can be enlarged or hydronephrotic (see below) and warrants Urology referral. Kidneys which differ in size by >2cm can suggest renal artery stenosis (particularly in the presence of high BP, or when eGFR declines by >25% when starting an ACEi or ARB) and warrants referral to Nephrology.
Atrophic unilateral kidney	An atrophic kidney (small and shrunken) in the presence of an otherwise normal urinary tract does not always need referred. If BP is satisfactory and kidney function is stable, this suggests either a congenital or adaptive aetiology and management will be as per CKD pathway. If BP is uncontrolled and kidney function is deteriorating, this might suggest renal arterial disease and warrants referral to Nephrology.
Kidney Appearance	Cortical thinning and focal scarring are common findings and are both associated with CKD. They are not reasons alone for referral (unless biochemical criteria are met). Decreased cortico-medullary differentiation and increased echogenicity are non-specific findings. They should prompt urine dipstick and testing of kidney function, but if these are normal, no referral is required.
Simple renal cysts	These are common. 50% of 50 year olds will have one on imaging. They rarely cause pain and do not undergo malignant transformation with time. These rarely will result in deterioration of a patients' renal function. These patients do not need referral to unless you are convinced that the cyst is the cause of patients' pain (in which case, refer to Urology).
Complex renal cysts	Not all complex renal cysts on ultrasound will be cancerous. However without further radiological imaging GPs should assume this is a potential diagnosis and refer the patient via 2ww urology cancer referral form. The finding of polycystic enlarged kidneys (particularly in someone with a family history of ADPKD) should prompt referral to Nephrology.
Angiomyolipoma	Benign finding consisting of blood vessels, smooth muscle and fat. If small, < 1 cm = NO follow up. If between 1-3cm = repeat annually, where clinically appropriate. If > 4cm OR if the patient is female of child bearing age refer to Urology
Mild hydronephrosis	Repeat ultrasound scan and arrange baseline renal function. Refer to secondary care if no change OR arrange a CT KUB non-contrast in primary care. CT will usually be normal, if so reassure. If abnormal, refer to urology.
Bilateral Hydronephrosis	Discuss with on call urology registrar
Renal stones	Refer to urology if symptomatic. Urological referral not normally indicated for asymptomatic stones or for stones found incidentally.