

abdo USS

duplex scan kidneys

May demonstrate:

- renal artery stenosis
- renal artery obstruction (e.g. arterioembolism, aortic dissection)
- renal vein thrombosis (e.g. procoagulant states, renal cell carcinoma)

Screens for free fluid (dark anechoic appearance), gross solid organ injury and pericardial tamponade

Four views:

- perihepatic—Morrison's (hepatorenal) pouch
- perisplenic—splenorenal recess
- pelvic—pouch of Douglas (female) or rectovesical pouch (male)
- pericardial—subxiphoid and parasternal views

FAST

May demonstrate:

- fluid collections (may indicate ongoing bleeding, bile leakage, infection or ascites)
- portal vein thrombosis or stenosis
- hepatic artery thrombosis, stenosis, pseudoaneurysm
- IVC stenosis or thrombosis
- bile duct strictures— anastomotic or non-anastomotic

post liver transplant duplex USS

cholecystitis

Acalculous cholecystitis:

- gallbladder wall thickening >3 mm in a non-collapsed gallbladder
- striated gallbladder secondary to gallbladder wall oedema
- sonographic Murphy's sign (localised gallbladder tenderness)
- pericholecystic fluid—without generalised ascites
- mucosal sloughing
- intramural gas
- echogenic bile (sludge)
- gallbladder distension (>5 cm transverse diameter)

Calculous cholecystitis:

- same features plus echogenic gallstones which may be impacted in the gallbladder neck

obstructed renal tract

Ultrasound should be routinely performed in the presence of acute renal failure

Unilateral or bilateral obstruction:

- dilated caliceal system, renal distortion and perinephric oedema, hydronephrosis with ureteric dilatation
- obstructing masses or calculi