RENAL TRANSPLANT SONOGRAM

Recommended Transducer(s):

GE 700: 5 or 3.5 MHz curved linear probe.
Acuson Sequoia: 4CI or 4VI
GE Logiq 9: 3.5 curved or 4 sector

Images:

Longitudinal	Medial segment. Mid segment. Mid segment with measurement (length). Lateral segment. Color and spectral Doppler of interlobar arteries in the upper, mid and lower segments. Calculate the resistive index. Calculate the acceleration time and index (AT and AI) only if there is a question of renal artery stenosis. Main renal vein (color Doppler) to document patentcy. Include the iliac anastomosis if possible.
Transverse	Upper pole. Mid upper segment. Mid segment. Mid lower segment. Lower pole.
Bladder	Sagittal Transverse

Notes:

- The diastolic flow in the interlobar arteries can be quite low. If no flow is seen lower the Doppler filter.
- In patient with hematuria and UTI, examine the native kidneys as well.
- Any cystic lesion found in the renal transplant, particularly in the upper and lower poles, needs to be investigated with color Doppler. Pseudoaneurysm is a common vascular complication of renal biopsy.