

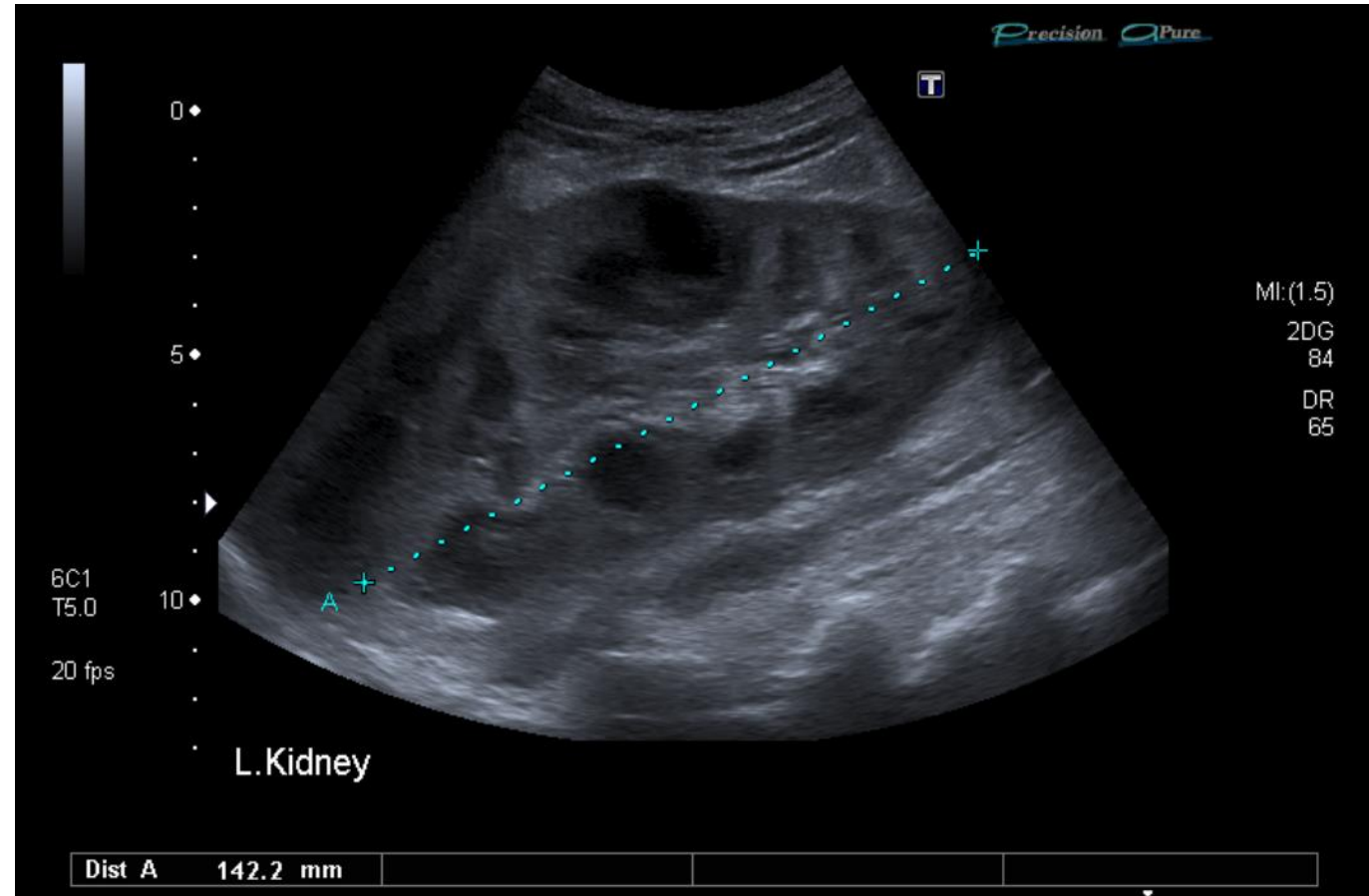
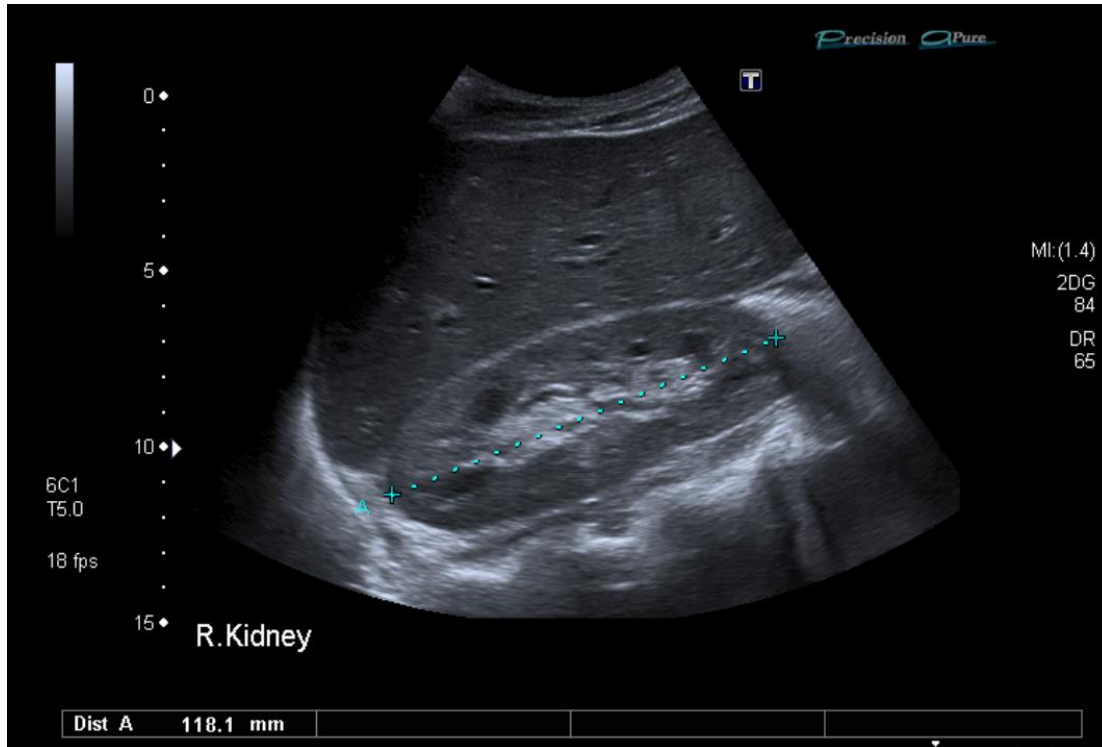
General Medical Case 5

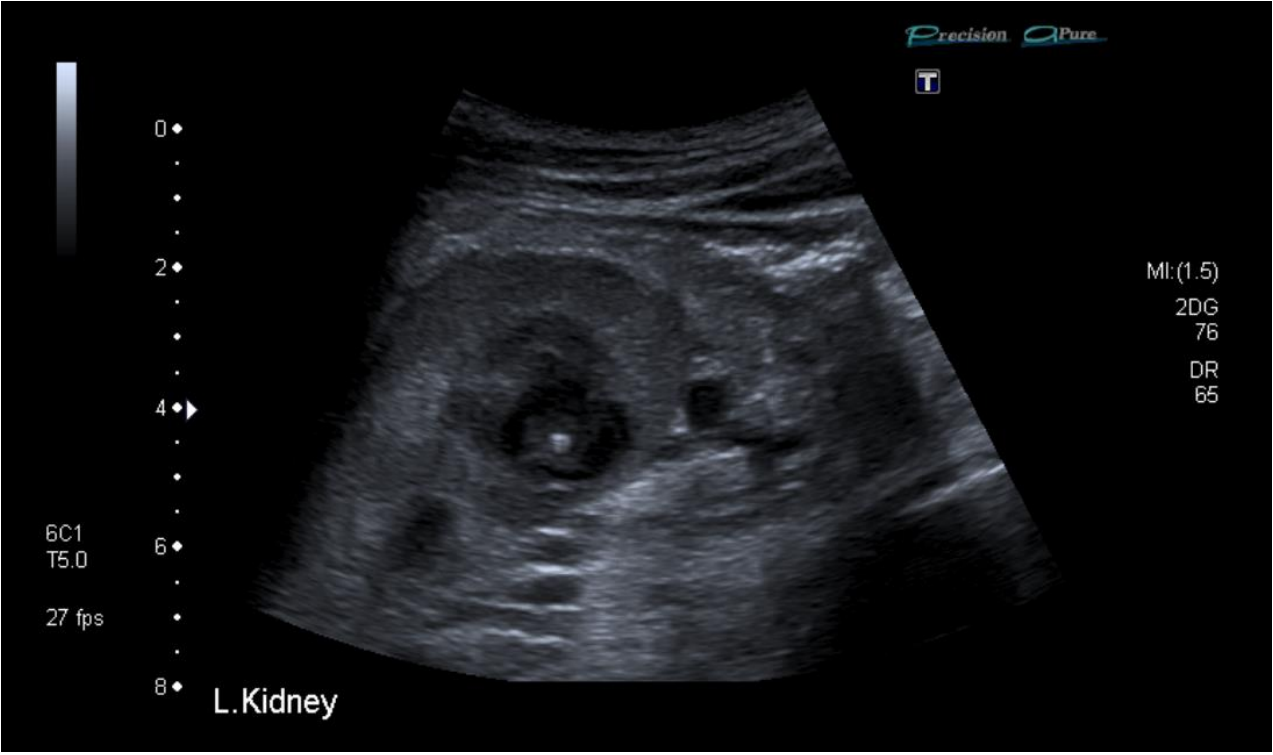
August 2022

Clinical details:

Unwell patient. Left loin pain. Fever. Foul smelling urine. AKI stage 2, blood creatinine 144.

Ultrasound to assess kidneys and liver please.







Do not progress to next slide until you have attempted to write your own report

US Report:

At the interpolar region of the left kidney there is a 28mm cystic lesion with thickened and oedematous walls. Patient is focally tender over the left kidney. There is unilateral enlargement of the left kidney to a maximum length of 14cm. Appearances are likely secondary to pyelonephritis with abscess formation.

Both kidneys show increased echogenicity of the renal parenchyma in keeping with known AKI.

Conclusion:

Left sided pyelonephritis with abscess formation at the mid-pole.

Epidemiology/Incidence:

More than 75% of perinephric abscesses are now due to complications of urinary tract infection. A perinephric abscess is more diffuse and affects the renal capsule and Gerota's fascia. These abscesses can extend from Gerota's fascia into the psoas and transversalis muscles as well as to the peritoneal cavity and the pelvis.

Risk factors:

Diabetes mellitus, pregnancy, urinary tract infection, and structural abnormalities in the urinary tract. Urinary tract abnormalities include nephrolithiasis, especially large staghorn stones, neurogenic bladder, vesicoureteral reflux, obstructive tumour, papillary necrosis, and PCKD. Around 20 to 60% of patients with perinephric abscess have associated renal calculi.

Symptoms:

Fever, flank pain, abdominal pain, and fatigue. Note: Dysuria and urinary frequency typical of urinary tract infection are usually *not* present in many patients with perinephric abscesses.