Persistent Grade 5 Reflux into a Transplanted Kidney in a Spinal Patient Despite Sphincterotomy

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A 43 year-old spinal injury patient was found to have asymptomatic hydronephrosis of his transplant during annual surveillance (**Figure 1**). Prior to presentation, he had developed urinary tract infection and serum creatinine was measured at 159µmol/l. His past history was remarkable for type 1 diabetes since the age of 5, spinal artery thrombosis aged 19 culminating in a C6 incomplete tetraplegia and diabetic nephropathy for which he received a live donor transplant at the age of 37. Bladder management involved convene drainage and he had undergone two previous sphincterotomies. Videourodynamics revealed a stable bladder during filling but high pressure sustained contractions during voiding resulting in grade V reflux into the transplanted kidney (**Figures 2a & b**). The bladder emptied completely with no evidence of dyssynergia. The patient was counselled regarding his treatment options and was listed for repeat videourodynamics in 6 months.

There is limited data on renal transplant outcome in spinal injury patients. It is acknowledged that transplant reduces urolithiasis and has similar outcomes to non-spinal patients.[1] Endoscopic management is recognised as first line treatment for transplant related reflux.[2] Where concomitant graft reflux and acute retention occur due to prostatic hyperplasia hybrid techniques involving holmium enucleation and simultaneous nephrostomy have been described.[3]

Figure 1. Ultrasound revealing Hydronephrosis of the transplanted kidney.

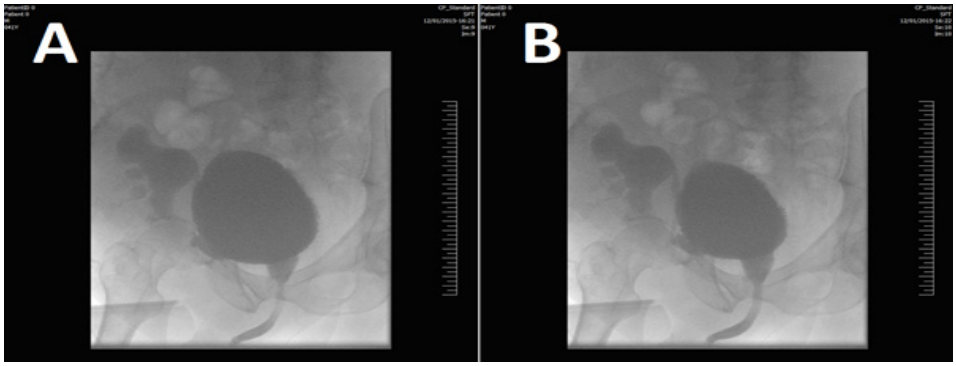

Figure 2. a: Videourodynamic trace demonstrating reflux into the transplanted kidney with clubbing of the calyces; **b:** Videourodynamic trace demonstrating grade 5 reflux into the transplanted kidney and neoureter with clubbing of the calyces.

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