SHOULD PATIENTS HAVE URODYNAMICS WHEN AWAITING RENAL TRANSPLANT IF THEY HAVE DECREASED URINE OUTPUT?





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BACKGROUND

The waiting list for renal transplantation is increasing, resulting in more patients being anuric or oliguric (urine output < 100ml and 400ml / day respectively) at the time of transplantation.

LUT dysfunction can cause high pressure vesico-ureteric reflux (VUR), increasing the risk of recurrent urinary tract infections (rUTIs) leading to impaired renal function and premature loss of the graft kidney.



<u>AIM</u>

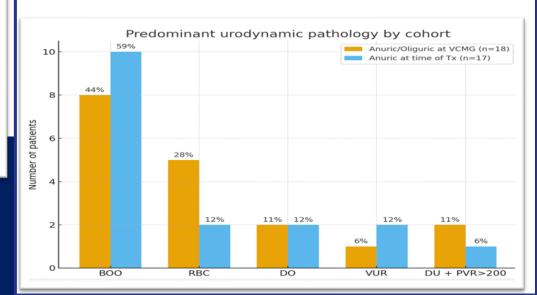
To assess the prevalence of LUT dysfunction during video urodynamics (VUDS) in patients who were either anuric/oliguric awaiting renal transplant or anuric at the time of transplant.



METHODS

Perform video urodynamics in patients anuric / oliquric at the time of:

- VUDS (n=18).
- Renal transplant (n=17).





RESULTS

35 patients with a median age of 45 years (20-66), 24 males.

100%

Of patients had LUT dysfunction identified. 26/35 patients had VUR during VUDS assessment.

62.5%

Of patients who had a **previously failed transplant** (n=16) **had BOO**, which likely contributed to the decline of graft function.

57%

Of patients with rUTIs (n=7) had LUT dysfunction which could result / worsen VUR.



3 YEARS

Median anuric duration (range 2-12 years) of patients (n=7) that had primary RBC (in the absence of BOO), suggesting **chronic reduced bladder volumes can result in RBC** and potentially affect long term renal graft function if left untreated.



Anuria / oliguria can mask LUTS and/or directly causes LUT dysfunction (reduced bladder capacity and compliance). These patients should have VUDS pre-renal transplantation, especially if they have previously had failed transplants, history of voiding LUTS or long-term decreased urine output.