

Editorial referring to the paper: Antoniewicz AA, Zapala Ł, Bogucki A, Malecki R. The standard of urological consultation of patients qualified for renal transplant – a review. Cent European J Urol. 2015; 68: 376-382.

Urological evaluation prior to renal transplantation

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In this issue Antoniewicz and colleagues [1] review the standard of urological consultation of patients qualified for renal transplantation. Basic evaluation of the urinary tract is performed in all patients during qualification for kidney transplantation to exclude urinary tract infection, cancers, urinary obstruction and to assess the need for native kidney nephrectomy. Detailed medical history, physical examination, urine test and culture, blood PSA level in male recipients and ultrasound of the urinary tract are sufficient in most cases. Anatomical or functional abnormalities, such as urinary retention, vesicoureteral reflux, decreased urinary bladder capacity, are indications for more complex urological evaluation. These problems may result from congenital urinary tract disorders and affect up to 25% of children with end-stage kidney disease. However, detailed urological evaluation should be considered in all patients with unknown cause of renal failure.

Some questions should be answered during urological evaluation:

1. Is there any potentially curable form of obstruction in urine outflow?

Anatomic obstruction, i.e.: urethral stricture, posterior urethral valve or bladder neck fibrosis, requires

surgical treatment before kidney transplantation. In case of benign prostatic hyperplasia in patients with oliguria, surgery, if necessary, may be postponed after kidney transplantation.

2. Is the recipient's bladder function sufficient to ensure proper excretion of urine?

This assessment must cover both the size and capacity of the urinary bladder and detrusor activity. Reduced capacity of the urinary bladder is common problem in patients on dialysis with long lasting oliguria, however bladder dysfunction in such cases is temporary and usually rehabilitation is fast and uneventful after transplantation. In rare cases of permanently impaired bladder capacity surgical augmentation should be considered.

3. Does any of the following conditions exist: passive or active vesicoureteral reflux, urolithiasis, hydronephrosis, urinary fistula?

In such cases, unilateral or bilateral nephrectomy is usually necessary before transplantation. Patients with significantly enlarged kidney may also need pretransplant nephrectomy.

Proper diagnosis and correction of urological disorders during evaluation of a potential kidney recipient prevents complications after transplantation and improves kidney graft survival.

References

1. Antoniewicz AA, Zapala Ł, Bogucki A, Malecki R. The standard of urological consultation of patients qualified for renal transplant – a review. Cent European J Urol. 2015; 68: 376-382. ■

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