Vesicoureteral Reflux After a Canine Renal Transplantation

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Vesicoureteral reflux (VUR) is characterized by the retrograde flow of urine from the bladder to the kidneys. VUR may be associated with urinary tract infection (UTI), hydronephrosis, abnormal kidney development, ureteroneocystostomy and renal transplantation.

A two years old, intact male Cocker Spaniel dog, underwent experimental renal transplantation. Dilatation of the renal pelvis without any clinical signs was observed at the periodic ultrasonographic examination on 39 weeks after receiving a renal transplantation. We performed CBC, biochemistry profile, urinalysis, urine culture, ultrasonography and radiography. Positive -contrast retrograde cystography showed dilatation of the ureter and renal pelvis by the retrograde flow of urine. However, BUN and serum creatinine concentrations were maintained within reference ranges. VUR was diagnosed based on the ultrasonographic results.

The Second ureteroneocystostomy was performed to correct VUR. After the surgery, the dilatation of the ureter and renal pelvis was not observed any more.

VUR could be occurred due to ureteroneocystostomy in renal transplant animals. Although normal renal function is maintained, the surgical correction of the ureteroneocystostomy site is recommended to prevent a damage of urinary tract including the kidney.

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