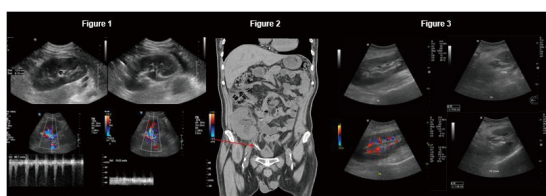


# A case of Urinary stone after kidney transplantation

충남대학교 병원 내과

\*한수현, 이강욱, 나기량, 최대은, 함영록

Urinary stones in transplanted kidney are one of the rare cause of post-kidney transplantation complications. The incidence was reported below than 1% in kidney transplantation, and stones occurred between 2 months and 17 years after kidney transplantation. Although post-kidney transplantation urinary stones are thought to be related to elevated PTH, recurrent urinary tract infections, urinary retention, no definite cause of urinary stones has been found. We report a case of multiple urinary stones after kidney transplantation. A 53-year-old male patient visited to ER with chilling, oliguria, and general edema. In reviewing past medical history, he prescribed CAPD under unknown cause ESRD 13 years ago. There were no complications such as peritonitis, urinary tract infection, renal stone for 6 years. He has been taking the cinacalcet 50mg bid for secondary hyperparathyroidism for 10 years ago. On March, 2018, he underwent cadaveric kidney transplantation, Rt. On 3rd post-operation day, there was no stone and no hydronephrosis in sonographic evaluation. On August, 2018, five months after KT, he visited to ER with chilling, oliguria. Multiple ureteric stones and hydronephroureterosis were found in transplanted kidney via CT evaluation. The percutaneous nephrostomy was performed. On admission day, the serum creatinine was 3.84 mg/dL and self voiding was 0 cc with 1300 cc drain for PCN. On 18th admission day, the serum creatinine was 1.11 mg/dL and self voiding 1600 cc. He discharged at September, 11, 2018. The patient underwent ESWL six times, however, there were not effective. In addition, ureteroscopic extraction was failed. Various efforts for stone removal are failed except stone removal operation.



**Figure 1. Renal Doppler sonography** : shows normal parenchymal echogenicity and mild hydronephrosis without obstructive cause. The renal artery velocity is 65.7cm/s(hilar level), that there is no evidence of stenosis. The renal vein is patency velocity is 14.6cm/s. (April, 2nd, 2018)  
**Figure 2. Abdomen pelvis CT(non-enhance)** : shows presumed stones in distal segment of ureter, transplanted kidney causing hydronephroureterosis. (August, 26th, 2018)  
**Figure 3. Kidney sonography** : shows slightly renal parenchymal echogenicity, regular cortical margin. It shows mild hydronephrosis and ureter dilatation (0.94cm). (September, 17th, 2018)