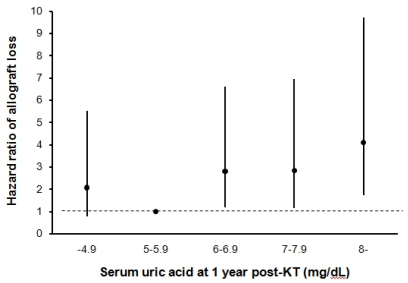
Association between serum uric acid and allograft outcomes after living donor kidney transplantation

Department of Internal Medicine, Hanyang University College of Medicine, Seoul, Korea

*Jeong Eun Kim, Il Hwan Oh, Chang Hwa Lee, Gheun-Ho Kim, ChongMyung Kang, and Joon-Sung Park

Although hyperuricemia is common feature in kidney transplantation (KT) recipients, the impact of hyperuricemia on allograft outcomes remains unclear. We performed retrospective analysis on living donor KT recipients to investigate hyperuricemia influencing allograft survival. All 281 KT recipients were divided into 5 groups according to serum uric acid (UA) levels (mg/dL): Quintile 1 (n=46), ≤5; Quintile 2 (n=62), >5 and ≤6; Quintile 3 (n=70), >6 and ≤7; Quintile 4 (n=53), >7 and ≤8; Quintile 5 (n=50), >8. The multiple linear regression analysis showed higher 1-year post-KT eGFR calculated by CKD-EPI equation (p<0.0001), lower serum UA level (p=0.0050) as significant predictors for better graft survival at 10 years post-KT. Linear regression analysis showed that serum UA level was significantly associated with the allograft kidney function at 1-, 3- and 10-year post-KT. In Kaplan-Meier analysis, KT recipients in Quintile 5 had a poor dialysis-free survival as compared with middle 3 and low quintiles (164±11, 197±6, vs. 180±5 months, p<0.05). Using Quintile 2 as a reference, the hazard ratio of allograft loss was found to be 2.081 (95% CI=0.786-5.511) for Quintile 1, 2.084 (95% CI=1.19 -6.605) for Quintile 3, 2.853 (95% CI=1.168-6.965) for Quintile 4 and 4.106 (95% CI=1.734-9.726) for Quintile 5. Our results suggest that there was a J-shaped association between serum UA levels and allograft outcomes in living donor KT recipients.



Peritoneal dialysis peritonitis associated with cat-induced Pasteurella multocida infection

Department of Internal Medicine, Incheon St. Mary's Hospital

*Il Kim, Young Wook Kim, Sung Jun Kim, Sungjin Chung, HyeEun Yoon, SeokJoon Shin

Pasteurella multocida is a zoonotic pathogen found in the oral cavities of either domestic animals, such as dogs and cats, or wild animals. Despite P. multocida has been involved in a wide range of human diseases, very limited number of publications about the cases related to P. multocida peritonitis in PD have been reported. We have experienced case of P. multocida peritonitis in the patient undergoing continuous ambulatory peritoneal dialysis (CAPD) due to contact with cat. We suggest that the peritoneal dialysis patients who have domestic animals should be noticed not to earn infections from the animals and that patients should be reminded that they should take care of their personal hygiene.

Table 1. Clinical characteristics of P. multocida-related peritoneal dialysis peritonitis in patients with continuous ambulatory peritoneal dialysis

References	Age/Sex	Animal contact	Dialysate culutre	Dialysate WBC counts (cells/μL) (% PMN)	Intraperitoneal antibiotics
Frankel et al. 1991 (5)	55/Male	Cat exposure	Positive	4,240 (not described)	Gentamycin Vancomycin
Kitching et al. 1996 (6)	75/Male	Cat bite	Positive	25,800 (82)	Vancomycin Cefamandole
MacKay et al. 1997 (7)	73/Male	Cat exposure	Positive	1,823 (94)	Vancomycin Ceftazidime
Cooke et al. 2004 (8)	73/Female	Cat exposure	Positive	4,442 (90)	Gentamycin Vancomycin
Antony et al. 2005 (4)	48/Female	Dog exposure	Positive	2,30 (90)	Cefazolin Gentamycin
Weiss et al. 2012 (9)	57/Male	Cat exposure	Positive	25,879 (79)	Vancomycin Ceftazidime
Present case 2012	25/Female	Cat exposure	Positive	4,992 (98)	Cefazolin Gentamycin

PMN, polymorphonuclear cell