

PERIOPERATIVE POTASSIUM COMPLICATIONS IN HEMODIALYSIS PATIENTS.

Neeraj Kumar, Clenton Coleman, Michael F Michelis, Maria V DeVita. Division of Nephrology, Department of Medicine, Lenox Hill Hospital, NY, NY, USA.

Data has shown that hemodialysis (HD) patients (pts) undergoing surgical procedures, experience an increased frequency of peri-operative (op) complications with hyperkalemia ($\uparrow K$) being common. There is limited data on the management of these pts. We have previously reported retrospective and initial prospective data on pts undergoing peripheral vascular surgery (PVS). The purpose of these studies was to measure periop potassium (K) in HD patients to detect $\uparrow K$ ($K > 5 \text{ meq/l}$), and the need for urgent HD. Now we report prospective data of 69 pts undergoing PVS. Serum K was measured preop (within 24 hrs), intraop, and postop (0-12 hrs). Date of the last preop HD, and the need for unscheduled HD was also recorded. Only 36 (52%) had outpatient K prior to PVS. Inpatient preop K ranged from 3.6-7.3 meq/l (mean = 4.8 ± 0.8), 19 pts had $\uparrow K$. Intraop K was done on 43 pts, 12 had $\uparrow K$ (range = 3.8-5.6 meq/l). Postop K ranged from 3.6-6.2 meq/l (mean = 4.8 ± 0.9), 27 had $\uparrow K$. Complications defined as either cancellation of surgery or unscheduled HD was seen in 7 pts (10%). All required unscheduled HD ($K \geq 5.6 \text{ meq/l}$), 3 had their surgery cancelled. The majority of the pts with preop $\uparrow K$ had their last HD > 24 hrs prior surgery. These findings reveal a wide range of K in HD pts undergoing PVS. We propose measuring K within 24 hours of surgery to avoid cancellation or urgent HD.