Phosphate was present in 185 of 1744 formulations (11%) of 124 different medications prescribed to 101 Canadian HD patients. Thirty percent of the patients received at least one of these phosphate containing medications; the mean phosphate burden in these patients was 111 mg/day (range 9–251 mg/day).

The effects of a concerted effort to replace foods containing phosphate additives with additive free foods was evaluated in a controlled, randomized study of 134 hyperphosphatemic HD patients. Serum phosphate declined from a mean of 7.2 to 5.0 mg/dl in the intervention group but changed minimally (7.1 to 6.7 mg/dl) in the control group.

Patiromer (12.6 g/day) was studied in six HD patients in a clinical research center where patients were on a controlled diet with 1 week on and 1 week off the binder. In addition to reducing serum potassium by a mean of 0.6 mEq/l, serum phosphate also fell (7.0 to 6.2 mg/dl) with a mean increase in stool phosphate of 112 mg/day.

A randomized, 12 week, double-blind trial in 60 diabetic HD patients found that neither fish oil (4 g/day) nor aspirin (100 mg/day) reduced the risk of fistula failure or thrombosis.

Initiating dialysis with a catheter rather than a fistula increases mortality risk. However, patients starting dialysis with a catheter after a failed fistula attempt have a lower mortality risk than those never having a fistula attempted (HR 0.66); their mortality was not much worse than that of patients initiating dialysis with a fistula (HR 0.50). Data are from a study of >100,000 HD patients ≥67 years old.

A pilot, 6 month, randomized trial in 68 patients with a healed central venous dialysis catheter found that showering followed by a dressing change did not increase the risk of catheter related bacteremia (0.88 vs. 0.68 per 1000 catheter days, showering vs. control) or exit site infection (also 0.88 vs. 0.68 per 1000 catheter days).

A study of nasal and extra nasal staph aureus colonization in 70 HD patients before central vein cannulation found that 28% were persistent carriers (two positive cultures 1 week apart) if defined as nasal carriage but that 64% were carriers if defined as two positive cultures in any of five sites (throat, axilla, toe webs, access site plus nose). At 90 days follow-up there were 15 staph aureus infections; all were in carriers.

A study compared 5077 patients initiating HD after allograft failure to patients starting HD who had never been transplanted; USRDS data and a Cox analysis with 21 variables were used. The mortality risk for the failed transplant patients was increased by a lack of an AV fistula (HR 1.22), being underweight (HR 1.30) and a low serum albumin (<3.5 g/dL; HR 1.33) but not by a low hemoglobin.

A retrospective case control study of 2178 HD patients receiving a coronary drug eluting stent found that among 377 ulcer free, incident patients, 1 in 5 developed foot ulcers within 5 months; their risk of amputation was increased 3-fold.

Among 183 incident PD patients with a normal ejection fraction, 36% had severe (grade 3) diastolic dysfunction. A low total triiodothyronine level was independently associated with this finding.

A DOPPS report from 21 countries found that 7.5% of 76,689 patients were hepatitis C positive. Their adjusted risk for death was increased (HR 1.12) as were their risks of hepatic-related mortality (HR 5.9), hospitalization (HR 1.09), blood transfusion (HR 1.36) and severe anemia (1.12). ALT and AST levels were usually normal (90th percentile: 41 U/L and 39 U/L, respectively); only 1.5% received antiviral treatment.

A program of monthly foot checks of diabetic HD patients found that among 377 ulcer free, incident patients, 1 in 5 developed foot ulcers within 5 months; their risk of amputation was increased 3-fold.

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A study of 638 HD patients found that both mild ($N = 149$) and substantial ($N = 337$) volume overload by bioimpedance were associated with an adjusted 1.9 fold higher risk of frequent nighttime awakenings as well as fewer hours of sleep.16

The measurement of nitrogen in dialysate and urine collections in PD patients provides an accurate measure of dietary protein. An analysis of 672 such collection in 104 patients found that dietary protein accounted for only 18% of the variations observed in their serum albumin.17

Trimethylamine N-oxide (TMAO) is an atherogenic uremic toxin whose levels are about 20 fold higher than normal in dialysis patients. Analysis of patient blood samples from the HEMO Study ($N = 1232$) found that white patients in the highest quintile of TMAO had an adjusted 3.9 fold increased risk of cardiac death; risks were less clear in black patients with elevated levels.18

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