

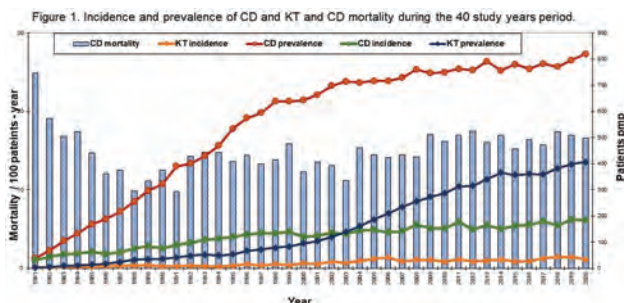


Figure 2. Incidence and prevalence of CD and KT percentage change during the 40 study years period.



SA-PO620

Implementing a Protocol for Incremental Hemodialysis in Incident Patients with ESKD: A Quality Improvement Project

Ali Taha,¹ Alexander Messina,¹ Alexander Tom,¹ Reman I. Altar,¹ Nancy Filteau,¹ Daniel Blum,² Emilie Trinh,¹ Catherine L. Weber.¹ ¹McGill University Health Centre, Montreal, QC, Canada; ²Hopital General Juif, Montreal, QC, Canada.

Background: Incremental hemodialysis (HD) is the process whereby the frequency of HD is adapted to the patient's residual kidney function, initially starting at twice a week with an increase based on clinical indications. Incremental HD potentially facilitates the transition to HD, reduces patient and caregiver burden, improves quality of life and reduces costs. We sought to increase the number of patients commenced on incremental HD at a tertiary care academic center and to develop a safe process to monitor these patients.

Methods: We performed a prospective cohort quality improvement study. Starting November 1 2022, we aimed to start 75% of eligible incident chronic HD patients on incremental HD within 1 year. Eligible patients were defined as medically stable with no acute, active medical issues, and no indication for more frequent HD. The primary outcome measure was percentage of incident ESKD patients started on incremental HD. The balancing measure was the number of patients requiring transition to three-times per week HD. The incremental HD process was developed with input from all stakeholders.

Results: Between November 1 2022 and March 31 2023, among 35 incident chronic HD patients, 14 were eligible for incremental HD, of which 9 started incremental HD. As of May 2023, 6 patients remain on two-times per week HD and 3 patients required an increase to three-times per week HD. The process developed included a) a patient information sheet about incremental HD b) nursing education, c) a nurse led protocol whereby the patient performs a 24 hour urine collection for volume and the nurse completes a safety checklist every 6 weeks, and d) an alert system for the MD to review the patient's HD prescription if they have uremic symptoms, are volume overloaded or hyperkalemic.

Conclusions: We successfully initiated 64% of eligible incident HD patients on incremental HD, of which two-thirds remained on twice-weekly HD. Our next steps will involve feedback from patients and healthcare staff through quantitative and qualitative surveys with the goal of optimizing our protocol and expanding it to all dialysis units at our center.

SA-PO621

A Vulnerable Population: Case Series Examining Involuntarily Discharged Hemodialysis Patients in an Urban, Predominantly Black US Population

Zikora U. Nnadike,¹ Anjali Shah,¹ Carol A. Gray,² Loren C. Cobb,³ Christopher M. O'Donnell,^{1,2} Jose E. Navarrete,^{1,2} Jason Cobb,^{1,2} ¹Emory University School of Medicine, Atlanta, GA; ²Emory Healthcare, Atlanta, GA; ³Meharry Medical College, Nashville, TN.

Background: An overlooked population is the number of insurable involuntarily discharged hemodialysis (HD) patients receiving maintenance HD. Presented is a case series examining involuntarily discharged HD patients receiving maintenance HD in inpatient settings in an urban US population.

Methods: Retrospective chart review of potential involuntarily discharged HD patients from 2020 – 2023 observed at Emory Hospitals and Grady Memorial Hospital. Studied were insurable end stage kidney disease (ESKD) patients who started HD as inpatient and were seen for inpatient dialysis >60 days and patients involuntarily discharged from a HD center.

Results: Among the 25 ESKD patients – all Black race and 68% male. 13 discharged for noncompliance, 8 discharged for disruptive behavior, 3 for insurance reasons, and 1 undetermined. HD vascular access – permcath (n=13), arteriovenous graft (n=4), and arteriovenous fistula (n=8). Observed hospitalizations for HD ranged from 3 to 298. The 3 patients discharged for insurance reasons included 2 patients initiated on HD as an inpatient and declared ESKD and received HD as an inpatient >60 days. Suspected noncompliance prevented them from being accepted despite being insurance eligible. 16 patients received a second chance outpatient HD center, and 1 was discharged from the second chance HD unit.

Conclusions: This case series brings attention to a vulnerable nephrology population. Most of the patients were discharged for subjective reasons like noncompliance and the impact of biases are hard to determine, but the patients being 100% Black is remarkable. The high level of success with second chance HD center placement demonstrates a need for interventions. More data is needed to examine geographic variances, economic impact, and the psychological toll emergency-only inpatient HD is having on these patients.

SA-PO622

Characteristics and Outcomes of High-Acuity Patients Referred for Outpatient Dialysis

Gopa B. Green,¹ Eric D. Weinhandl,^{1,2} Graham E. Abra,^{1,3} Tejas Gopal,^{3,1} Juan D. Ordóñez,¹ Wael F. Hussein,^{1,3} ¹Satellite Healthcare, San Jose, CA; ²University of Minnesota Twin Cities College of Pharmacy, Minneapolis, MN; ³Stanford University School of Medicine, Stanford, CA.

Background: Dialysis-requiring hospitalized patients with co-morbid high-acuity needs are challenging to place in outpatient dialysis centers, leading to extended hospital stays. In 2018, we established a program for physician evaluation of high-acuity referrals for admittance to outpatient dialysis centers. The program provides care coordination with the discharging hospital, necessary dialysis-related medical equipment, and training of center staff to manage need for bed or bariatric bed, left ventricular assist device (LVAD), tracheostomy, behavioral issues requiring supervision, infection with communicable organisms, or other high-acuity co-morbid conditions. Little is known about the safety or efficacy of outpatient dialysis for high acuity patients.

Methods: We describe the characteristics and outcomes of patients referred to the program from January 2018 through April 2023.

Results: The program received 468 referrals, of which 149 (31.8%) initiated dialysis at outpatient dialysis centers of a mid-size non-profit dialysis provider. 304 patients were excluded due to reasons including inadequate staffing or space, clinical instability, and overly complex management needs. The most common indications for admission were the need for a special gurney or bed (99 patients), tracheostomy (22), and LVAD (8). The mean (SD) age was 62.7 (14.0) years, 41% were female, and 59% had diabetes. 21% of patients had a central venous catheter at the time of referral into the program. During 152 patient-years of follow-up, re-hospitalization rate at 1 month was 37%, with an admission rate of 2.7 per patient-year and 21 hospital days per patient-year. Despite this, 94% of the patients' survival time was spent out of the hospital. Survival rates at 3, 6, and 12 months were 76%, 71%, and 59% respectively.

Conclusions: A program that utilizes nephrologist evaluation, care coordination, additional equipment, staffing, and training can facilitate hospital discharges and address the care needs of high-acuity patients undergoing dialysis in the outpatient setting. Despite high comorbidity, these patients can benefit from being out of the hospital the majority of their time post admission to the dialysis center.

SA-PO623

Nephrologist Involvement in the Multi-Organ Failure Patient with Artificial Liver Support Systems: Experience of the Single-Center Extracorporeal Therapy Program in Mexico

Abel Humberto V. Compean,^{1,2} Pedro Morales Molina,^{1,2} Diana Maldonado Tapia,^{1,2} Monica Lopez Mendoza,^{1,2} Pamela Prado,^{1,2} Claudia B. López,^{1,2} Irving G. Ramirez,^{1,2} Julio C. Nieto,^{1,2} Beatriz R. Cerezo Samperio,^{1,2} Juan D. Diaz Garcia.^{1,2} ¹Universidad Nacional Autonoma de Mexico, Ciudad de Mexico, Mexico; ²Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, Mexico City, Mexico.

Background: The role of the nephrologist in intensive care is critical and includes the implementation of extracorporeal therapies, such as combined artificial hepatic-renal support, which provides time for rapid inclusion in an emergency liver transplantation program or recovery from acute failure. The most used methods are the molecular adsorbent recirculating system (MARS) and single-pass albumin dialysis (SPAD).

Methods: Objective: To expose the experience in the multiorgan support of critically ill patients with extracorporeal liver and kidney support therapies at the Centro Medico Nacional 20 de Noviembre. Retrospective study of patients with acute liver failure from 2016 to 2023 who underwent MARS or SPAD therapy.

Results: Of 21 patients, 43% were women and 57% men, with an average age of 38 years. The etiology of the liver disease was autoimmune in 47%, hepatitis A infection in 19%, cryptogenic in 14%. Ten of these patients had a previous liver transplant, 47% with recurrence of the disease or chronic rejection; the indication for liver support was 66% for acute chronic liver failure and 34% for acute liver failure, with SOFA score 9.8±8, MELD