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LETTER TO THE EDITOR

Cardio-renal service, time for a change

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We read with great interest the article by Burlacu et al. [1] on cardio-nephrology. We wholeheartedly agree that a sector within nephrology should be dedicated to this field of medicine. Patients often are sent from cardiologist to nephrologists and back and forth, leading to cyclical cardio-renal syndrome, and the patients suffer as a result of suboptimal management [2]. Additionally, the literature in both fields needs to be cohesive and aimed toward the same goal of improvement of patient care. At our center, we have developed over the last 9 years a separate clinical service named the 'cardio-renal service'. This inpatient service serves to take consultations from the cardiologists and cardiothoracic surgery on regular medical floors, telemetry units, and cardiac and cardio-thoracic intensive care units. This service has allowed for positive things to happen: a

dialogue that is more consistent between the two fields; and a group of nephrologists that is gaining substantial interest and expertise in cardio–renal syndrome, left ventricular assist device-associated acute kidney injury (AKI), cardiac bypass surgery and valvular surgery-related AKI, transcatheter aortic valve replacement-associated AKI, heart transplant-associated kidney disease and so forth. The trainees—both nephrology and cardiology fellows—have benefitted from rotations and educational discussions during combined grand rounds and journal clubs. This novel service has also led to outpatient cardio–renal specialists that help manage patients in a similar manner. Table 1 summarizes a potential curriculum that could be built around a cardio–renal service. Other centers around the world should strongly consider such an approach for optimal patient

Table 1. Topics encompassing a cardio-nephrology curriculum

Advanced heart failure including ventricular assist device therapies, heart transplantation workup and palliative care options.

Use of novel therapies (SGLT2i and the GLP-1RAs) in patients with chronic kidney disease and cardio–renal syndrome.

Continuous kidney replacement therapy (timing in cardiac post-operative setting).

Preoperative risk stratification and optimization of patients undergoing complex percutaneous coronary interventions, transcatheter valvular procedures and cardiac surgery with underlying kidney disease.

Medication monitoring and dose adjustment, based on eGFR.

ESKD, dialysis and complications such as pulmonary hypertension, heart failure, arrhythmias and coronary artery disease. Point-of-care ultrasound (lung, IVC, renal venous congestion assessment).

Diuretics dose adjustment and methods for ultrafiltration in a combined approach with cardiology and nephrology.

Acute mechanical circulatory support and impact on kidney function.

Management of electrolyte disorders (hyponatremia, hyperkalemia, hypomagnesemia seen commonly in patients with cardio–renal syndrome).

Anemia and iron management in patients with heart failure and/or chronic kidney disease.

ESKD, end-stage kidney disease; GLP-1RAs, glucagon-like peptide-1 receptor agonists; SGLT-2i, sodium-glucose co-transporter 2 inhibitors; IVC, inferior vena cava; eGFR, estimated glomerular filtration rate.

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care, improved multidisciplinary collaboration between specialists and enhanced education for our trainees.

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CONFLICT OF INTEREST STATEMENT

N.N.U. serves as the Nephrology Director of the cardio-renal service at Northwell Health-North Shore University Hospital, NY. K.D.J. is a consultant for Astex Pharmaceuticals, Natera, GlaxoSmithKline, ChemoCentryx, and Chinook, a paid

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