

NOVEMBER/DECEMBER 2014

**Ronald D. Adelman, MD**

Co-Chief  
Geriatrics and Palliative Medicine  
New York-Presbyterian/  
Weill Cornell Medical Center  
rdadelma@med.cornell.edu

**Mark S. Lachs, MD, MPH**

Co-Chief  
Geriatrics and Palliative Medicine  
New York-Presbyterian/  
Weill Cornell Medical Center  
mslachs@med.cornell.edu

**Evelyn C. Granieri, MD, MPH, MSED**

Chief, Geriatric Medicine and Aging  
New York-Presbyterian/  
Columbia University Medical Center  
eg2279@cumc.columbia.edu

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## Considerations for Older Adults with End-Stage Kidney Disease

As the world’s population continues to age – and the number of older adults expected to increase steadily – a significant portion that is infirm and frail will likely require renal replacement therapy at some point. The high prevalence of chronic kidney disease and end-stage renal disease in older adults is not surprising due to the increase of obesity, diabetes, and hypertension in younger and middle-aged adults. These factors pose medical and ethical challenges to practitioners who strive to provide the best care possible for their patients given their often comorbid conditions and poor prognosis.

“Older patients with chronic and end-stage kidney disease have an extremely limited life expectancy and suffer from significant symptom burden, similar to patients with other end-stage organ failure or cancer,” says **Nathaniel Berman, MD**, a nephrologist at New York-Presbyterian/Weill Cornell Medical Center and The Rogosin Institute. “And as dialysis has been offered more broadly, it is now initiated earlier than in decades past, further adding to cost and patient burden.”

“We know that the number of people going on to dialysis is increasing – the fastest growing population is 75 years and older,” says **Maya K. Rao, MD**, Director of Inpatient Dialysis, Department of Medicine, New York-Presbyterian/Columbia University Medical Center, and a nephrology consultant at New York-Presbyterian/The Allen Hospital. “There is a bridge between geriatrics and nephrology because of the aging population that is developing kidney disease and then possibly going on to dialysis.”

### Transplantation and Dialysis: What Makes Sense for the Patient

According to Dr. Berman, who specializes in chronic kidney disease and hemodialysis, younger and otherwise healthy dialysis patients who eventually receive a kidney transplant will often go on to live long lives. “If they just have kidney involvement without any systemic diseases, they can do very well,” he says. “However, patients who are not transplantable, who come to dialysis with systemic illnesses such as diabetes, other organ



Dr. Nathaniel Berman

involvement, dementia, old age, and frailty – these are factors that reduce their prognosis. To treat all of these patients in the same way just because they are all on dialysis doesn’t make a lot of intuitive sense when you consider their life expectancies.

“There are no absolute contraindications to transplant,” notes Dr. Berman. “This center has transplanted otherwise perfectly healthy patients in their late 70s and early 80s, although not very commonly. But in order for a person in their late 70s to qualify for a kidney transplant, he or she must be in good physical shape, whereas we may transplant a patient who is 50 years old with other medical problems. The risk of transplantation up front is significant. There are immunosuppression medications and surgical complications. The risk of dying is higher in the first three to six months after transplant than it is with dialysis. So, if you are a patient whose life expectancy can be measured in a couple of years, and your operative risk is very high, that’s when transplant does not make sense. It is not about age – it is purely asking if it is the right approach for this patient.”

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## Considerations for Older Adults with End-Stage Kidney Disease (continued from page 1)

Much of Dr. Berman's research focuses on the "non-transplantable" patients – those who are too sick for a transplant, most of whom are elderly. Dialysis patients have a range of medical issues that informs their treatment, explains Dr. Berman. These include patients with polycystic kidney disease who are essentially healthy but have poor kidney function, or individuals with lupus erythematosus who have a systemic illness that can affect the joints, skin, heart and lungs, as well as kidneys. "These are very different patients," says Dr. Berman. "We don't look specifically at age. We are looking more into finding criteria that might isolate patients that really are the sickest, who feel the worst, and those who might benefit the most from a palliative intervention. Transplant status takes many prognostic factors into consideration, including age and comorbidities. That is why we believe 'non-transplantable' is a useful category."

For the very sickest and oldest patients for whom dialysis is contemplated, Dr. Berman notes that dialysis may not extend life. "And one could certainly make the argument that dialysis is not going to improve their quality of life; there is quite a bit of data to suggest that," says Dr. Berman, whose article on end-of-life matters in chronic renal failure appeared in the December 2014 issue of *Current Opinion in Supportive and Palliative Care*.

### Alternatives to Dialysis

Once a patient goes on to dialysis, the older and frailer persons with poor performance status and who have a high number of comorbidities have a greater symptom burden, comparable to patients with end-stage COPD or cancer. "Their reported symptoms are that bad," says Dr. Berman. "Yet very little is known about how to treat these patients. What are the best palliative measures? What are the best narcotics and drugs to use? What works and what doesn't work? There are a lot of paths that bring people to end-stage renal disease, yet when they get there, they're all lumped together and they shouldn't be. There are many factors that make them different."

Dr. Berman and his colleagues are currently developing an experimental palliative protocol that would minimize medications for these patients. Rather than treating someone maximally as one would for someone whose prognosis is good, they consider removing medications whose benefit is unknown and whose harm has been demonstrated. "You can give someone 15 medications a day, but they have side effects," says Dr. Berman. "If someone has a prognosis of a year, is it worth treating their cholesterol, their blood pressure, or their phosphorus levels when the benefit hasn't been established? That's the intervention – which group would you target to pull back on with less aggressive therapy."

The model is not that patients are older and sicker and there is nothing that can be done for them, Dr. Berman stresses, but rather a model that these patients have severe, systemic illnesses and perhaps preventative measures, such as blood pressure control that stops something from happening years ahead, might not make sense because they won't live long enough to realize the benefit.

In 2013 Dr. Berman and his Weill Cornell colleagues undertook a study of improving symptom management in hemodialysis patients, the results of which were published in the *Journal of Palliative Medicine*. "The basics have yet to be worked out in the

treatment of dialysis patients with a high symptom burden," says Dr. Berman, who conducted interviews with 34 healthcare providers and 20 caregivers. "Of all the disciplines, nephrology is perhaps the one with the least robust data. In this study we concluded that renal healthcare providers are often unaware of the symptom burden on their older hemodialysis patients, and there is a lack of ownership for assessing and treating their symptoms. We need to develop more effective treatment strategies for these patients."

"The elderly patient population with chronic kidney disease exists," adds Dr. Berman. "Some of these patients probably shouldn't have started dialysis to begin with. Once they start dialysis they're very sick. We're working on figuring out how to make them feel a little better."

Dr. Rao concurs, pointing out that some studies show that patients who are 75 and older with comorbidities do not fare well on dialysis and suggest that they would do better with medical management of their kidney disease.

**"We know that the number of people going on to dialysis is increasing – the fastest growing population is 75 years and older. Some studies show that patients who are 75 and older with comorbidities do not fare well on dialysis and suggest that they would do better with medical management of their kidney disease."**

**— Dr. Maya K. Rao**

"It's not clear if their life expectancy is actually increased with dialysis when they fall into the subgroup of having comorbidities, frailty, poor functional status, dementia, and those types of issues," she says. "Dialysis is thought to be a lifesaving treatment in the acute sense. For outpatients who have to do this for the rest of their life – especially if they are not a transplant candidate – I think it is legitimate to think about quality of life issues."

Dr. Rao also notes that mortality on dialysis is quite high; about 50 percent at two years in patients with diabetes, and if a patient is in a nursing home and starting dialysis, about 75 percent at one year. "The mortality is worse than a lot of cancers, and yet we don't really talk to our patients or even think about prognosis when we decide to start dialysis because we feel there is no other choice, particularly in the very elderly and very frail. We might even be doing harm by just dialyzing them."

The alternative, says Dr. Rao, is medical management. "I have had several patients in their 80s who lived for two or three years at a point past, by their numbers, we would have started them on dialysis," she says. "It can be done. It just takes a lot of time and energy. You have to deal with concerns beyond just the kidney numbers – people's pain, shortness of breath, fatigue. It's more of a palliative approach."

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Dr. Maya K. Rao

“For my patients who have decided they don’t want dialysis – and that’s a reasonable choice because their prognosis is quite poor – we focus on what we can do to make them feel better,” says Dr. Rao. “If they are anemic and very fatigued or short of breath we can give erythropoietin analogs and iron with the hope that by treating their anemia they’ll feel better. In terms of pain, we know that certain drugs in kidney disease aren’t good, like morphine, but other drugs like dilaudid and fentanyl can be better. Itching is a common complaint and gabapentin can help with that. If the patient is short of breath with fluid buildup, we give them a high dose of diuretics even if it makes their kidney function a little bit worse because the more important thing is for them not to feel short of breath.”

### The Future: Education and Treatment Expectations

Dr. Rao, along with Evelyn C. Granieri, MD, MPH, MSED, Chief of the Division of Geriatric Medicine and Aging at NewYork-Presbyterian/Columbia, are focusing on an educational component in nephrology training in geriatrics to encourage physicians to have discussions with patients around their choices of

treatment. “One of our projects includes surveying the last 10 years of nephrology fellows who trained at Columbia to find out how comfortable they are with talking to patients about these issues, applying different methods of prognostication, and whether they are doing this in their practices,” says Dr. Rao. “We’re going to use this data to build a curriculum program that might possibly be available citywide here in New York.”

Dr. Rao also hopes to receive IRB approval for a study of out-patient dialysis patients to learn if they understand the prognosis of their kidney disease, if their symptoms are being addressed, and what they want and expect for their future health needs.

The American Society of Nephrology provides guidelines on shared decision making for providers and patients before starting dialysis, which Dr. Rao says is helpful, but perhaps underutilized by nephrologists.

“Hopefully there will be some innovation in dialysis in itself going forward,” she says. “For the subgroup of people who are very, very sick and may not do well on dialysis, figuring out a multidisciplinary approach of conservative medical management and palliative care would probably lead to better outcomes and fewer hospitalizations. This is something that has not been studied in-depth, but I think is really right for research.”

#### Reference Articles

Berman N. End-of-life matters in chronic renal failure. *Current Opinion in Supportive and Palliative Care*. 2014 Dec;8(4):371-77.

Feldman R, Berman N, Reid MC, Roberts J, Shengelia R, Christianer K, Eiss B, Adelman RD. Improving symptom management in hemodialysis patients: identifying barriers and future directions. *Journal of Palliative Medicine*. 2013 Dec;16(12):1528-33.

Berman N, Christianer K, Roberts J, Feldman R, Reid MC, Shengelia R, Teresi J, Eimicke J, Eiss B, Adelman R. Disparities in symptom burden and renal transplant eligibility: a pilot study. *Journal of Palliative Medicine*. 2013 Nov;16(11):1459-65.

#### For More Information

Dr. Nathaniel Berman • nab2009@nyp.org

Dr. Maya K. Rao • mr2971@columbia.edu

## Study Highlights Prevalence of Mistreatment Between Nursing Home Residents

*Findings Underscore Need for Intervention for Common and Serious Problem*

Inappropriate, disruptive, or hostile behavior between nursing home residents is a sizable and growing problem, according to new research from Weill Cornell Medical College and Cornell University. The study found that nearly one in five nursing home residents was involved in at least one negative and aggressive encounter with one or more fellow residents over the previous four weeks. These included acts of verbal or physical abuse, inappropriate sexual behavior, or invasion of privacy, among other incidents, known collectively as resident-to-resident elder mistreatment.

Co-authors **Karl A. Pillemer, PhD**, Professor of Gerontology in Medicine at Weill Cornell, and **Mark S. Lachs, MD, MPH**, Co-Chief of the Division of Geriatrics and Palliative Medicine at

NewYork-Presbyterian/Weill Cornell, randomly selected 10 skilled nursing facilities with more than 2,000 residents in New York State. They determined that resident-to-resident elder mistreatment affected 19.8 percent of residents over a four-week period.

“This is the first study to directly observe and interview residents to determine the prevalence and predictors of elder mistreatment between residents in nursing homes,” says Dr. Pillemer. “The findings suggest that these altercations are widespread and common in everyday nursing home life. Despite the acute urgency of the problem, resident-to-resident mistreatment is underreported. Increased awareness and the adoption of effective interventions are greatly needed.”

## Advances in Geriatrics

New York-Presbyterian Hospital  
525 East 68th Street  
New York, NY 10065

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