Chapter 28: Integrated Care of the Elderly With ESKD

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Nephrologists worldwide are increasingly taking care of older patients. Mean age at the start of renal replacement therapy is 62.3 yr for men and 63.4 yr for women. Peak incident counts of treated end-stage kidney disease (ESKD) occur in the 70 to 79 age group at >15,000 patients per year. Peak incident rates of treated ESKD occur in the 70- to 79-yr-old age group at 1543 per million population.[1] Patients in this older age group are likely to have multiple comorbidities. The average 75 yr old suffers from 3.5 chronic diseases.[2] Chronic kidney disease (CKD) in the elderly rarely occurs in isolation from other chronic medical conditions and is often a marker for those conditions. Many symptoms in older patients are caused by multiple deficits and not by a single disease. These diseases and their treatments are likely to interact and complicate one another. Murray[3] has reported that up to 70% of dialysis patients 55 yr of age and older have chronic cognitive impairment of a level severe enough to impact on their compliance and ability to make informed decisions.[4,5] Prevalence of depression is reported to be as high as 45% in the older dialysis population.[6–8] Metabolic bone disease is complicated by age-related osteoporosis. The cardiovascular consequences of CKD are complicated by structural heart disease such as valvular insufficiency and atrial fibrillation. Neurodegenerative disease impacts on the patient's mobility and cognitive function. Osteoarthritis and neuropathy limit their physical activity. As age and disease advance, frailty becomes an issue. All of these things combine to make the care of the older dialysis patient much more complex than that of a younger individual. Drug interactions and inappropriate dosing becomes an increasing issue as the number of comorbidities and medications increases.

In 1992, Nespor and Holley[9] did a small study of in-center hemodialysis patients in Pittsburgh. Eighty percent of these patients did not have a family physician and relied on their nephrologist for all of their medical care. Ninety-one percent sought treatment from their nephrologist for minor acute illness. Nephrologists were also providing ongoing treatment for comorbid chronic illnesses such as diabetes and heart disease. In 1993, they went on to confirm similar statistics in their chronic peritoneal dialysis patients.[10] This would suggest that the nephrologist needs to be prepared to take on the full complexity of care for their older patients, particularly their chronic dialysis population. In older patients, this would include health maintenance screening and immunizations. Although malignancies are more common in both the dialysis population and in the posttransplantation population than in the general population, life expectancy, age, and cost effectiveness need to be considered by the nephrologists before ordering screening tests.

What can the geriatrician offer this very sick population? Geriatricians are trained to perform comprehensive geriatric assessment. This involves evaluation of all medical problems, but also covers several other domains—cognition, affect, functional level, sensory, socio-economic needs, and environmental needs. Most geriatricians practice in a multidisciplinary group that includes social workers, pharmacists, physical therapists, and nurse practitioners.

This group can help the patients with organizing their medical regimen and transportation to the dialysis unit.

They can provide support and counseling to the patient and family for coping with chronic disease.

They can advise on cognitive function and whether the patient should still be signing their own consents.

They can take care of the intercurrent illnesses and chronic conditions.

They can review and manage polypharmacy.

They can help manage pain.

They can coordinate the other specialty care.

Many practices now provide a transitional care clinic for rapid follow-up on discharge to prevent bounce back to the hospital.

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They can help evaluate whether the living environment is still appropriate.
They can identify community resources to help the patient remain independent in the community.
They can assist in nutrition management and access to appropriate food.
Geriatricians can also help with advanced care planning, guiding the patient through appointing an advocate and laying out their wishes with respect to end of life care.
Many geriatricians also have experience in palliative care and can manage the patient if and when they choose to withdraw from dialysis.

CONCLUSIONS

Cooperative care can be handled in two ways. Patients can be referred to a geriatric center for comprehensive geriatric evaluation and for ongoing primary care. Alternatively a geriatric physician can be asked to do consultative rounds in the dialysis unit and participate in team meetings. There are no studies that support either of these models in the ESKD population or data to show that you can improve quality of care, hospitalizations, or mortality statistics. However, the busy nephrologist may wish to consider using a geriatrician to help with the care of their most complex and frail elderly patients.

TAKE HOME POINTS

- Average age for starting dialysis is 62.3 for men and 63.4 for women
- Older patients have more comorbidities
- Cognitive impairment and depression are common in this group and complicates treatment
- Cooperative care with a geriatrician can help the nephrologists with the nonkidney issues

DISCLOSURES

None.

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REVIEW QUESTIONS: INTEGRATED CARE OF THE ELDERLY WITH ESKD

1. The average age for initiating dialysis is between
   a. 45 to 50
   b. 50 to 55
   c. 55 to 60
   d. 60 to 65
   e. 65 to 70

2. What percent of dialysis patients rely on their nephrologists for all of their medical care?
   a. 10%
   b. 30%
   c. 50%
   d. 80%
   e. 100%

3. A geriatrician can help with all of the following except:
   a. Cognitive evaluation
   b. Depression evaluation
   c. Library fines
   d. Polypharmacy
   e. Advance Care Planning