Chronic kidney disease in the Elderly and Frail

Author: Dr Will White, Renal Department, Barts Health
Version number: 1.0 Review Date: January 2025

OVERVIEW

- CKD in the context of frailty is associated with high risk of poor outcomes (AKI, CVD, fractures, dementia, harm from polypharmacy)
- However, reduced eGFR may be of less clinical significance in older or frailer patients than in the younger population
- Best management of these patients may differ from guidance for the general population, and needs to consider other factors such as independence and quality of life

Palliative Care The Renal Supportive Care team help look after patients with symptomatic Stage 5 CKD and those actively dying from it

- Please see separate guidance for advice regarding symptom control in Stage 5 CKD
- Palliative care services can provide assistance for patients dying of symptomatic Stage 5 CKD
- Consider advance care planning (DNACPR, preferred place of care and death) in a timely fashion, and ensure patient has an appropriate Coordinate My Care plan

KEY POINTS

Stage 3 and Stage 4 CKD

- GFR reduces with age (reduction of up to 2mL/min/year after age 70 years)
- In the absence of significant proteinuria (ACR > 70 mg/mmol or PCR > 100 mg/mmol) eGFR is less predictive of progression to symptomatic kidney failure with increased age
- Guidelines for the management of CKD lack evidence for use in older, frailer patients, and may be harmful

Stage 5 CKD

- Dialysis may offer only a modest increase in lifespan for patients > 80 years or > 70 years with poor performance status and significant comorbidities, and is often associated with reduced QOL
- Conservative or symptomatic management of kidney failure may be more appropriate for these patients
- Management should consider comorbidities, function and patient priorities, with an emphasis on maintaining independence and QOL
- Advance care planning should be considered at an early stage

CKD MONITORING + REFERRAL

Monitoring

- Frequency of monitoring of renal function should be agreed with the patient - decline may be very slow and inconsequential in quality of life terms
- There is little purpose in routine blood testing of patients who are for purely symptomatic management

Referral to Nephrology

- If rapid decrease in eGFR consider:
  - obstructive uropathy (US KUB),
  - myeloma (serum protein electrophoresis + serum free light chains)
  - UTIs
- Consider nephrology referral if there is an unexplained and sustained decrease in eGFR +/- new nephrotic albuminuria (urinary ACR > 320 mg/mmol)
- Any patient being considered for dialysis should be under the care of a nephrologist
- The Renal Supportive Care team help look after patients with an eGFR < 15 who are unsuited to or who have declined dialysis (email address under Speciality Advice)

Anaemia

- Patients with refractory and symptomatic renal anaemia (Hb < 100 g/L) may benefit from treatment with intravenous iron and/or subcutaneous erythropoietin via the vCKD service
- Renal anaemia should only be diagnosed once other causes of anaemia are excluded such as iron deficiency / B12 deficiency / folate deficiency / GI bleed / haemolysis
- 6 monthly blood tests are recommended for all patients on erythropoietin and 1-2 months after starting, restarting or changing dose

Chronic kidney disease in the Elderly and Frail

MEDICATION CAUTIONS

- Elderly are susceptible to ↑ K+ with NSAIDs, ACE-Is/ARBS or spironolactone (the latter severe and persistent due to long half-life)
- Trimethoprim can cause a self-limiting ↑ K+ & ↑ creatinine by inhibiting renal tubular secretion
- Elderly are susceptible to ↓ K+ & ↓ Na+ with loop diuretics and thiazides
- Some β-blockers (including atenolol and bisoprolol) will accumulate in advanced CKD and can cause bradycardia / bradyarrhythmias

MANAGEMENT TIPS

- Aim **standing** (in those who can stand) systolic **blood pressure** 130-160 mmHg, diastolic 80-90 mmHg: frail, elderly patients are at increased risk of postural hypotension causing falls
- Renal metabolism of insulin decreases with reduced eGFR leading to an increase in risk of **hypoglycemia**:
    - Avoid excessively tight glucose control: aim HbA1C 58-70 mmol/mol in frail elderly patients
- Avoid treating isolated **ankle oedema** with diuretics
- **Vitamin D deficiency** is common in elderly:
    - replace with colecalciferol (use of activated vitamin D to suppress PTH is no longer recommended in non-dialysis patients)
- There is an increased **risk of bleeding** in advanced CKD, which may outweigh the benefits of anticoagulation:
    - anticoagulation decisions (e.g. for AF) may need a MDT approach
- Elderly susceptible to **acidosis**:
    - keep serum bicarbonate > 22 mmol/L with oral sodium bicarbonate

- **Deprescribing** of medications that will not increase quality (nor realistically quantity) of life reduces pill burden and complications of polypharmacy

SPECIALITY ADVICE FOR GPs

Virtual CKD (via EMIS) or A&G (Systm 1)

Renal Supportive Care: bartshealth.renalsupportivecareteam@nhs.net

DIETARY ADVICE

- Elderly people with advanced CKD generally have a reduced appetite
- Strict adherence to usual renal dietary restrictions may not be necessary. It may be more appropriate to encourage “a little of what they fancy” to ensure small nourishing meals and snacks are eaten daily
- Healthy eating principles can also be relaxed and energy dense foods e.g. biscuits, cake, pastries can be encouraged

- Patients with diabetes should be guided by their diabetes team, in order to optimise their glycaemic control

- **No added salt diet** is recommended in Stage 5 CKD, the same as for the general population
- Foods can be flavoured with herbs, spices, garlic, onion, fresh ginger, lemon, vinegar and pepper instead of salt

- **Fluid restriction** is not typically required for elderly / frail patients with Stage 5 CKD. If a patient also has heart failure then fluid intake should be guided by their heart failure team

- If a patient has a healthy appetite then renal dietary advice may be applicable:
    - Low potassium diet
    - Low phosphate diet may help reduce itch

- First line low potassium, low phosphate and no added salt dietary information is available in both written & pictorial form from bartshealth.RLHrenaldietitians@nhs.net

Kidney Care UK low potassium diet sheet
https://www.kidneycareuk.org/documents/260/Lowering_your_potassium_levels.pdf

Please see the separate sheet for advice about oral nutritional supplementation

Author: Dr Will White, Renal Department, Barts Health
Version number: 1.0 Review Date: January 2025