



- Frailty is a clinical syndrome characterized by reduced physiological reserve and a higher risk of poor outcomes
- Age is a risk factor for frailty but not all older people are frail
- The management of CKD in the context of frailty requires a holistic approach

BACKGROUND POINTS

Suspect frailty in those with:

- Functional dependence on others
- Multiple co-morbidities
- Cognitive impairment

CKD in the context of frailty increases the risk of:

- Acute kidney injury (AKI)
- Progression to end-stage kidney disease
- Cardiovascular disease
- Dementia
- Fractures
- Harm from poly-pharmacy

Kidney Ageing

In those over 70 years old:

- a natural decline in glomerular filtration rate (GFR) can approach up to 2mL/min/year
- a GFR >30mL/min in the absence of acute illness, proteinuria or uncontrolled HTN is less likely to progress to end-stage kidney disease

Focus of Care in Frail Patients

- Should be patient and outcome centred
- View CKD in the context of an individual's comorbidities and personal priorities
- Renal replacement therapy (RRT) may not improve quality of life – focus on symptom control may be more appropriate
- Advance care planning and symptom management should be a priority

MANAGEMENT OF FRAIL PATIENTS WITH CKD

Identify frailty and screen for cognitive impairment

- Calculate EFI score (<https://doi.org/10.1093/ageing/afw039>)
- Screen cognition using GPCOG (<http://gpcog.com.au/>)

Medications

- Caution with the use of non-steroidal anti-inflammatory drugs (NSAIDs)
- Measure serum bicarbonate, consider oral replacement if <22
- Use diuretics to treat symptoms of fluid overload but refrain from treating isolated ankle oedema - diuretics may worsen measured kidney function
- Trimethoprim can temporarily increase serum creatinine and potassium

Renin-angiotensin-aldosterone system (RAAS) blockers

- Avoid dual ACE + angiotensin receptor blockade
- If eGFR falls by >25% and/or serum potassium rises >6mmol/L after starting or increasing dose, review for contributing factors, repeat test in 1-2 weeks, stop if no better
- "Sick Day Rules" if unwell / taking antibiotics, omit RAAS blockers, restart when well

Blood pressure (BP) or HbA1c targets - individualise to patient:

- Be wary of falls risk – check postural BPs
- Higher BP targets are appropriate eg. systolic BP 130-159 mmHg and diastolic BP 70-89 mmHg
- Be wary of hypoglycaemia risk with insulin and oral hypoglycaemic agents - aim for higher HbA1c targets eg. 58-68 mmol/mol

Diet – avoid protein restriction / aggressive salt restriction

Monitoring of renal function

- If RRT is considered - refer to NICE 2014 CKD Guidance (NICE CG182: Table 2, page 15)
- If RRT is unlikely to improve quality of life, tailor frequency to clinical need
- In event of sudden eGFR decline, exclude UTIs and obstructive uropathy

Consider referral to nephrology if:

- Unexplained and sustained decline in renal function / new nephrotic range proteinuria
- Even if RRT is not considered, refractory and symptomatic anaemia (<100g/L) in advanced CKD (stages 3b – 5) may require intravenous iron +/- erythropoietin supplementation

Further advice

Specialty advice is available to North West London GPs:

- ICHC-tr.ckdadvice@nhs.net (nephrology consultant advice, 36 hour maximum response time Mon-Fri)
- ICHC-tr.adviceelderlymedicine-imperial@nhs.net (consultant geriatrician advice)
- Renal or Elderly Care SpR on call via ICNHT switchboard: 0203 3131000
- <https://www.nice.org.uk/guidance/cg182>

This cohort of patients can be complex and management requires a multi disciplinary approach with specific attention to advance care planning and best interests to avoid inappropriately aggressive management