CHRONIC KIDNEY DISEASE AND FRAILTY

PRIMARY CARE MANAGEMENT OF **CKD**

Frailty is common among patients with CKD and becomes even more common as kidney disease progresses

The presence of frailty is a stronger predictor of outcomes than eGFR and is independently linked with adverse clinical outcomes in all stages of CKD

Screening in older individuals

CKD screening

Older adults should not be excluded from screening programs, but a holistic approach is required

How?

UACR and eGFR

Frequency? In those with a diagnosis of hypertension/T2D, screening should occur **at least once a year**

Frailty screening

Frailty screening should be **routinely performed** in CKD patients, particularly older patients

Comprehensive geriatric assessment (CGA) is the **gold standard** to assess and manage frailty

Diagnosis and classification of CKD

CKD is defined as persistent **(for at least 3 months)**

eGFR <60 mL/min/1.73 m^2,
albuminuria (ACR ≥30 mg/g)
or other markers of kidney damage

Considerations in older individuals

- Physiologic GFR decline needs to be distinguished from pathologic causes of CKD
- A hallmark of age-related kidney decline is the absence of proteinuria/albuminuria
- Confirmatory tests with cystatin C can help confirm a CKD diagnosis

Management of CKD in frail individuals in primary care

Treatment aim: Perspectives and treatment goals need to shift as older age and frailty become involved in patients with CKD

Polypharmacy and deprescribing

Deprescribing is recommended to reduce the medical burden and could involve less aggressive management of diabetes and/or hypertension:

- Statins have a limited benefit among individuals with limited life expectancy
- Long-term bisphosphonate can increase the risk of atypical femoral fractures
- SGLT2 inhibitors are well tolerated in frail older adults with or without diabetes

Adapting targets

- The interpretation of results and treatment targets should be adapted in older/frail people with CKD
- A creatinine-based eGFR will overestimate GFR in the elderly with sarcopenia
- UACR can be falsely high due to the falsely low creatinine in the denominator
- Strict BP lowering may come at a risk of dizziness and falls in frail adult, so a higher target is appropriate e.g. BP 130–159/70–89 mmHg
- HbA1c targets <8–8.5% (64–69 mmol/mol) may be considered among frail patients

Adapting lifestyle advice

- Consider higher protein and calorie dietary targets
- Avoid aggressive salt restriction
- Encourage low-intensity physical activity

Assess baseline physical activity level

Sedentary

Assess fall risk and comorbidity burden

- **LOW RISK** Recommend low-intensity activity and increase intensity as tolerated
- **HIGH RISK** Referral to exercise specialists

Physically active for <150 min/wk

Recommend to increase physical activity for **>150min/wk**

- Unable to increase activity level due to comorbid conditions - continue current level
- Achieves recommended physical activity level → **Assess and recommend muscle-strengthening activities**

Physically active for >150 min/wk

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Monitoring or referral

Monitor

- Falls risk
- Bone mineral density
- Weight loss
- Anticoagulant use

Consult/refer to nephrology if

- Unexplained and sustained decline in kidney function
- New nephrotic range proteinuria
- Refractory and symptomatic anemia

References: American Diabetes Association. Diabetes Care 2020; 43(Suppl 1): S152–S162; Kennard A, et al. Intern Med J 2023; 53: 465–472; Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. Kidney Int. 2024; 105; S117–S314; Mohottige D, et al. Kidney360 2021; 2(9): 1510–1522; Strain WD, et al. Diabetes Ther. 2021; 12(5): 1227–1247.

Acronyms: BP: blood pressure; CKD: chronic kidney disease; eGFR: estimated glomerular filtration rate; HbA1c: glycated hemoglobin; SGLT2: sodium-glucose co-transporter-2; T2D: type 2 diabetes; UACR: urine albumin-creatinine ratio.

PCDE primary care diabetes europe
KDIGO Kidney Disease: Improving Global Outcomes
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